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PENNSBURY

NORMAN B. WILKINSON

WHY STUDY MATH?

GENERAL ELECTRIC COMPANY

READING FOR DEMOCRACY

NATIONAL CONFERENCE
OF CHRISTIANS AND JEWS

Front Cover — Stock Yard Inn. *Back Cover* — Early and
Present Day Over-All Views of the Union Stock Yards.

Courtesy of the Union Stock Yards

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Courtesy of the Chicago Historical Society

WHAT'S IN A NAME?

HOWARD BRADLEY SMITH

PRINCIPAL OF THE MOSELEY SCHOOL

WHAT'S in a name? That is the question the friends of Moseley Social Adjustment School might have asked as they prepared for the 98th Anniversary Celebration of the founding of the school located at 2348 South Michigan Avenue and named in honor of Flavel Moseley.

Who was Flavel Moseley? The cynic might ask, "Who cares? And why bother?" But there's an inevitable lift of spirit when one examines the life of a great man, whether that man belongs to our current, brief interlude or to some long-forgotten era. One of the most vivid ways to relive early Chicago is to withdraw to the quiet, upper room at the Chicago Historical Society and place yourself under the very

competent and very gracious guidance of their experts. In a few moments they will lay before you just the time-worn volumes you need for your specific research. Suddenly the doors of the past swing wide open and for a little while the present seems unreal.

So it happened to this writer as the Society librarians drew the curtains for him and revealed the Chicago stage as it appeared in 1856, the year the Moseley School opened. The publicity blurbs of that day stated that the school house was built of "the best bricks to be had in Chicago." How much more extravagant the writer might have made his blurb had he known that ninety-eight years later the same bricks would be in the same place!

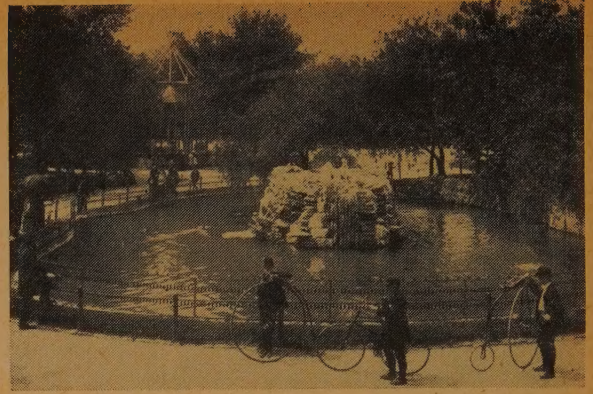
MOSELEY'S CONTRIBUTIONS NUMEROUS

The school was without a personality in the first few months being called simply "Number 7," after the custom of the period. Before the end of 1856 it had been christened Moseley after Flavel Moseley, a man with a heart. Flavel Moseley was born in the East one year after George Washington retired from the Presidency. He came west to establish a country store at Wells and South Water Streets in Chicago, a business in which he prospered as well as in real estate. Like many another of the truly great, he felt that his country had been good to him and that therefore he owed it a debt of gratitude which he must repay. He made that payment generously in money and in service. From 1850 to 1864 he served as member of the Board of Education, four years of that period as president. The Superintendent of Schools at that time wrote, "... the names of Scammon and Brown and Jones and Miltimore and Moseley and Foster . . . will be honored in the years to come as among the truest and most worthy benefactors of Chicago . . ."

Mr. Moseley had a very special interest in needy children. In December of 1855, when the plans for the new Moseley School were in progress, he donated \$1,000 to establish the first "Moseley public school



Photograph by Murrell Tinsley
Moseley School, 1856-1954



Courtesy of the Chicago Historical Society
Bicycle Races the Vogue in the Gay Nineties

fund," the interest of which was to be expended in the purchase of school books for "indigent children." In the report of the Board of Education of November, 1856, one notes that Mr. Moseley gave \$500 from personal funds to open a library in Chicago's first high school which had begun operation the month before. About this time a pathetic note was sounded in the Board reports to the effect that Mr. Moseley's first gift was found too small to support more than one-fifth of the calls of needy children for books. One year twelve gentlemen gave \$10 each to make up the deficit. The total school attendance in Chicago in 1856 was 3,688. There were brave civic leaders at this time who began to proclaim that free education should also mean free textbooks! Upon his death in 1865, Mr. Moseley left an additional \$10,000 to the Moseley fund, making the total of this noble charity \$11,000; students in 1954 are still enjoying the benefits of this perpetual trust fund.

Mr. Moseley was, for his day and time, a wealthy man. His will was deemed impressive enough to print and preserve in booklet form; it may be read today at the Chicago Historical Society. He left to his sisters, Hannah and Lucy, and brothers, Elathan, Anson, Eben, Harvey, and Edward, and their children a total of \$161,000; to the Second Presbyterian Church for the establishment of Sabbath

Schools, \$10,000; to the American Home Missionary Society, \$10,000; to the Chicago Home for the Friendless, \$20,000; and to the Moseley School Fund, \$10,000.

Tracing Moseley history is difficult because many records were lost in that tragic week in 1871 when fire swept over Chicago. Moseley itself was one of three schools spared since it was located at Twenty-fourth Street, called Monterey in 1856, and South Michigan Avenue as it is today. The great fire did not extend farther south than Twelfth Street. Many homeless families lived in the school building for a short time following the holocaust.

The fact that Moseley escaped the Chicago Fire has a bearing on the argument that occasionally arises as to which is the oldest public school building in Chicago. Moseley is the oldest public school building where school still continues at the same old stand. Any friend of the school who feels that old age merits special respect will defend this assertion as to its antiquity at the slightest provocation. This is not to say that names like Jones and Brown and Ogden are not old and famous in Chicago public school history, but those schools were not operating in their present buildings when the one and only Moseley School building was dedicated in 1856.

THE BEGINNING

The Moseley School first opened in a leased building, apparently in 1854, with one teacher receiving a salary of \$300 per annum. It was intended to care for the needs of a developing settlement known as the Carville industrial district located at Twenty-sixth Street and Cottage Grove Avenue. In 1855 petitions were presented to the Board of Education requesting a school building for "District 7," which was the portion of Chicago extending from Twelfth Street south. In 1856 the Moseley was opened and within the year the Armours and the Swifts and others moved into the area which immedi-

ately became known as the "Gold Coast." Later the school was to graduate George Horace Lorimer, former editor of the *Saturday Evening Post*; Flo Ziegfeld; Governor Henry Horner; and many others of the great of earlier days. Chicago, as an incorporated city, was nineteen years old when the school was opened. The lot was valued at \$20,000, the building at \$22,000. The publicity of the day further stated the "stairways of the New Moseley are constructed in half-flights and are remarkably easy . . . the interior is covered with two coats of the very best varnish."

A little later in that memorable year of 1856, Chicago's first high school was opened "for both males and females." Chicago's Board of Education pointed with pride to the fact that New York and Philadelphia were not yet (in 1856) broad-minded enough to admit "females" to their high schools.

Eleven years earlier, a school building was named by the public "Miltimore's Folly" after the unhappy engineer who promoted it. It was argued that there were never enough children to fill it. The Inspectors, as the Board of Education was then called, were forced to resign because of their extravagance. Miltimore's Folly cost the large sum of \$7,500.

It was not easy to gain admission to the new high school. Here is a sample entrance examination question in geography: "Mention all the seas, gulfs and bays on the coast of Europe." If you think you might have fared better in arithmetic, try this one, "Find the greatest common denominator of 125,350 and 365." Or this one, "Find the square root of 988,001."

We find that "the Bible was read each morning in all schools but without note or comment." A little later, in 1860, we find the superintendent of schools worried about "an affected and vicious type of pronunciation which is coming into vogue among our young people. In words like 'commencement' and 'assistant', the last syllable often receives at least twice the



Derby Day at Washington Park, 1898

Courtesy of the Chicago Historical Society

stress that legitimately belongs to it. Webster and Worcester are partly to blame. They are obscure as to the exact quality of the final vowel in such words."

What was happening in Chicago in 1856? The Chicago and Milwaukee Railroad had just been completed; the Illinois Central had been extended all the way to Cairo. Suburban service had just been instituted to Hyde Park on the Illinois Central with four round trips daily. Rumblings of the coming Civil War were becoming more ominous. Abe Lincoln, a Springfield lawyer, was coming to Chicago occasionally as a trial lawyer. In 1856, Abraham Lincoln and Frederic Douglass both spoke in Chicago on the subject of freedom. Marshall Field arrived that year from Pittsfield, Massachusetts, and took a job as clerk with Cooley, Wadsworth and Company.

GRADUATES REMINISCE

At the annual homecomings, sponsored by the Moseley City-Wide Parent-Teacher Association, our current students are visibly impressed by the stature, import-

ance, and age of the graduates of long ago who appear for the celebrations. There was, for example, Walter K. Greenebaum, now 73 years of age, who traveled 11,000 miles from the Middle East to be present. Mr. Greenebaum is now owner of a travel bureau, a world traveler himself, and a lecturer of note. He was graduated from the Moseley School in 1892.

This seemed a long time ago until Edwin W. Mosher, 95 years old, appeared to represent the class of 1870. Then there was Malcolm S. Philip of Chicago Heights, 84 years old, a graduate of the class of 1879, who reminisced as follows in a letter received by the school at the time of the big occasion:

Many of the children of foremost families of Chicago went to Moseley. One of the Mandels was in my class; Adelaide Harding was also in my class — she was a sister of the Harding who was at one time either city or county treasurer . . . Bournique's dancing school was located on 24th Street near Indiana Avenue where the children of the elite were taught the social graces . . . Wabash Avenue was paved with cedar blocks and the busses used to travel to the city limits at 31st Street . . . Michigan

Avenue was a macadam road and offered a good street on which to display many fashionable equipages and fine stepping horses in summer and sleigh races in winter . . . Twenty-second Street in 1870 was just a woods. We used to watch the bicycle races on Michigan Avenue. The Elevated was run by steam; bread sold for six cents a loaf.

Passing Moseley today, ensconced along Chicago's automobile row with the Cad-

illacs and the Packards and the rest of the elite, it is difficult to realize what the venerable bricks of this 98-year-old school building saw in the year of her birth. Four hours in the quiet, upper room at the Chicago Historical Society will do much, however, to acquaint one with the spirit and the tempo of 1856, a spell which is not easily shaken.

INDUSTRY AND THE SCHOOLS

In Indianapolis, Indiana

WILLARD J. GAMBOLD¹

CONVINCED that Indianapolis young people had only a hazy idea of how the American economic system actually functions in their own community and that they needed to know more about the industrial and business life of the city, Indianapolis leaders in education, business, industry, and labor have undertaken a co-operative, long-range program to develop the teaching of economic understandings in the Indianapolis public schools.

The program originated with a recommendation to the Board of School Commissioners of the City of Indianapolis by Dr. H. L. Shibler, General Superintendent of Education, in July, 1951. Even though economic education in our schools throughout the nation has begun to receive more stress, there has been too little pin-pointing of the local scene. In the words of Dr. Shibler:

When an Indianapolis youngster watches his father leave for work each morning . . . , the boy probably doesn't realize that the business, created because of a desire to make profits, is enabling the father to bring home food and clothing for the family and to save money that will enable the boy to have a college education. We must give our children in school a better appreciation of what the private enterprise system provides for a family.

Excerpts from Dr. Shibler's report to the School Board, July 31, 1951, reveal

the objectives of the program and the methods that were to be employed:

Since so many of our own students are not well informed about the history, resources, and opportunities of our community, we feel that a very thorough educational program, built on materials relative to Indianapolis, should be developed and should become a part of our curriculum.

To get this across to the students we must provide the teachers with curriculum materials that will become an important part of their daily work. To develop this material would require the work of a skilled person who is able to do careful research and write effectively. Materials would first be used in the classrooms on a tryout basis and then later be put into book form. The books should be carefully graded to suit the varying maturity of the children from grade to grade.

Visual materials, such as filmstrips and films, would be developed to accompany the books as teaching aids. Field trips to business and industry would be a part of the general program. The eventual educational possibilities in this field with television are almost limitless. Of course we would want to continue our counseling service to our high schools, provided by business, professional, and industrial men and women in this community.

If such a program could be gotten under way we would want to set up an advisory committee of citizens, representing business, industry, and the professions, to advise closely with the person writing this material and with the school system, so that we could at all times have their

¹Director of *Indianapolis at Work*

best judgment relative to the material being developed.

The Superintendent turned to the Indianapolis social studies curriculum to find that teachers at all levels in the school system were trying to develop worthwhile economic understandings. But a search for current materials about economic processes in the city revealed a critical shortage. The need was apparent all the way upward from the elementary grades through high school. For example, there was no medium for publishing current data about local business and industry; for dealing with issues and problems relating to local industry; for presenting information about job opportunities; for presenting information about the relationship of government and business; and for presenting biographical materials about present-day citizens. These considerations led to the establishment of *Indianapolis at Work* as a publication of the Indianapolis Public Schools.

STEPS IN ORGANIZATION

Getting the project under way involved:

Conferences by the superintendent with civic leaders.

Pledge of funds by civic leaders.

Organization of an advisory committee.

Appointment of a director for the project.

Organization of an editorial committee of teachers for advice and evaluation of materials.

Curriculum study to show need of special materials at various grade levels.

Gathering information about industrial and business life of the community.

Publication of materials, in tentative form, for pupils.

Conferences with advisory committee.

Experimental use of published material.

Re-evaluation, editing, and publishing of first issue.

With the Board's approval and the co-operation of leading citizens, the Superintendent called together a group of persons that became the advisory committee for the project. This committee, of approximately thirty persons, was composed of representatives of business, industry, la-

bor, the press, the schools, and parent organizations. A successful effort was made to secure top-level personnel on the committee in order to insure full-fledged co-operation and responsible leadership from the organizations represented. Consequently the group, whose membership has changed surprisingly little during the two and one-half years of operation, is liberally sprinkled with presidents, vice-presidents, editors, and managers.

Through the Indianapolis Chamber of Commerce, civic leaders and industrial groups pledged a fund for the use of the Board in carrying the project through its first three years. Those firms contributing agreed to pay yearly a sum ranging from \$100 to \$300. Every effort has been made by the Chamber of Commerce to attract as many donors as possible in order to spread the base of participation and increase interest in the project. It is anticipated that the cost of operating the program will be absorbed into the local school budget next year.

The Superintendent appointed Dr. Byron B. Williams, of the University of Rochester, New York, as the first director of *Indianapolis at Work*. Dr. Williams was formerly educational adviser to America's Town Meeting of the Air and was later assistant managing editor of the American Education Press. He was instrumental in establishing the discussion plan now known as Junior Town Meeting. In his new job in Indianapolis he was to have again the opportunity to pioneer in setting up a program, unique in aspect and untried in any other city. In his desire to pattern the material to fit the needs of the pupils, Dr. Williams chose an editorial committee of teachers who could advise him in evaluating copy and assist him in interpreting the program to other teachers in the school system.

The original plan embraced the production of instructional materials for pupils in grades four through twelve, these materials to include books, filmstrips, and other visual aids. In order to realize im-

mediate benefits for pupils now in the upper grades and to avoid the time lapse necessary for the production of materials in a more permanent form, publication of an eight-page news-magazine, entitled *Indianapolis at Work*, was begun and is being used in grades seven through twelve. The publication is designed to show, through localized pictures and stories, illustrations of how free enterprise and the profit system work out in Indianapolis business fields.

A committee of department store managers co-operated in assembling data for the first issue. A group of bankers, organized by the Indianapolis Clearing House Association, assisted with the development of the second issue, relating to banks and banking in Indianapolis. Subsequent issues have dealt with the telephone industry, newspapers, foundries, insurance, construction, foods, consumer credit, pharmaceuticals, coal mining, printing, and electric utilities. At least seventy different potential fields of business in Indianapolis remain to be covered.

A step-by-step description of the preparation, publication, and distribution of a particular issue of *Indianapolis at Work* may best illustrate our operations and procedures.

Suppose the director, after consulting with the Superintendent and his advisory committee, chooses the subject of pharmaceuticals. He will write letters to six or eight persons connected with various phases of that industry, acquainting them with the general purpose of our program and asking them to serve on an industry committee to furnish materials and information for the article. Represented on the committee will be a director of quality control of a large pharmaceutical house, a public relations manager, a wholesale druggist, a retail druggist, and the executive secretary of the local medical society.

At their first meeting the industry committee will discuss the general nature of the issue and will proceed to block out the

major divisions of the pharmaceutical story. Various members are asked to furnish information to the director relative to their particular responsibilities in the industry. Deadlines are set for copy, and when the first draft has been completed it is sent out to every member of the advisory and editorial committees for comments and suggestions. Members of the industry committee will also circulate copies among their own personnel. After a process of amendment and refinement, another draft is prepared. Copies are then sent to certain schools in order that teachers may actually test the material in their classrooms. Quite often the comments of the pupils are valuable in shaping up the finished product. For example, the pharmaceutical issue contained a different style of narration and student reaction was necessarily vital.

The final draft, representing the combined thinking of the director, the members of the various committees, teachers, and pupils is then ready for publication. Pictures, portraying the various operations in the industry, are added and the copy goes to the printer. The printing of this issue was done by offset at one of the local high school print shops; 20,000 copies usually comprise the initial press run.

The allocation of an issue to a particular grade level is the responsibility of the teacher editorial committee. The pharmaceutical story, "Making Medicines for Better Health," was assigned to the eleventh grade social studies course. Enough copies were sent to each school for every pupil enrolled in these classes; accompanying the issue was a teacher's study guide. These aids are prepared for each article. The instructors are allowed some freedom in the manner in which they fit the work into the semester's schedule. Obviously, the more resourceful teachers are able to make extensive use of the material, but even the less imaginative teachers have accomplished good results.

In grades seven, eight, eleven, and twelve the *Indianapolis at Work* stories

are used in social studies classes. In grades nine and ten the English classes are the point of contact. The latter group agreed to participate in order to insure the widest possible circulation of the issues. Every effort is made to allocate to English pupils the articles most nearly appropriate to that subject. For example, those classes study the stories on newspapers and communication.

SURVEY RESULTS

A survey made at the end of the first year showed that a majority of nearly 1,000 pupils who used the first three issues of *Indianapolis at Work* found them valuable. Eight out of ten of these pupils said they now "appreciate more what business and industry mean to our city." When asked if some of their ideas had changed, these pupils reported "in 6 out of 10 cases that their attitudes about *profits*, in 5 out of 10 cases that their attitudes about *owners*, and in 4 out of 10 cases that their attitudes about *unions* had become more favorable." Ninety-two per cent of the pupils reported that they had learned "something," with 51.7 per cent of these reporting they had learned "a great deal" from the publications. The director is planning another survey during the current semester. With twelve issues in circulation, a more comprehensive evaluation should be possible.

As the backlog of issues grows our curriculum will face a problem that is germane to that of schools everywhere. With the constant inpouring process going on, there must be some weeding out. One possible solution is for curriculum co-ordinators, teachers, and administrators to be constantly alert to keep only those things in the curriculum that are vital to the needs of the pupils in preparing them for living in today's world. The *Indianapolis at Work* program was instituted for that

very purpose. Another solution for us may be the extending of our program into the lower elementary grades.

After a particular issue has been published it often receives publicity in the house organs and trade journals connected with that specific industry. Eight hundred requests for the insurance pamphlet poured into our offices from all over the country; the Indianapolis branch of a national food store chain ordered 3,500 copies of the food story; a local pharmaceutical firm requested 1,900 copies of the pharmaceutical issue, 900 of which were distributed to members of their sales force. Such a widespread demand from industry for copies demonstrates the possibilities for expansion of economic education into the adult area and indicates a healthy interest in the project.

Too often in the past, educators and patrons alike have decried the lack of concentration of the schools' attack on economic ignorance and civic stupidity. Pupils were instructed about the world at large but caught no glimpse of their own community, its environs, and its immediate problems. The *Indianapolis at Work* program was designed to "bring them down to earth," to sharpen the focus, so to speak.

The free enterprise system and our American way of life deserve greater emphasis in teaching today. And sometimes, strangely enough, those who protest their love of the system most loudly appear, by their statements, to have the least confidence in its strength. In Indianapolis, public spirited, civic minded men and women have joined forces with the schools to tell the American story. One of the great virtues of our economic system is its stolidity. With such community help and inspiration, may it always retain that spirit in the years to come!

Our schools seeks to keep alive and vibrant those personal qualities which have made our nation, its commerce, its industry, and its manpower great. — Herold C. Hunt

STANDARDIZED TESTS AND ARITHMETIC ACHIEVEMENT

MARY DE KOKER

SUPERVISOR OF ELEMENTARY ADJUSTMENT SERVICE¹

IN arithmetic children are introduced to the measures by which man describes in quantities the things he finds in this world. Through arithmetic children develop an understanding of our number system by achieving proficiency in using numbers. Children come to terms with numbers in much the same way as they learn in other areas, namely, through experience. Quantity as it involves size, shape, time, and distance must be encountered successfully by the young child as he learns to manipulate his own body, his toys, and utensils. Thus each child has had much experience with quantity before he enters school at the age of five or six. Furthermore, his feelings for numbers and the extent of his desire to learn arithmetic are conditioned by his family background. The elementary school attempts to help children learn how to communicate in quantitative terms by enriching their experience with quantities and by teaching them the common spoken and written symbols that enable one to think and to communicate in these terms. Authorities tell us that by the time children reach the age of nine most of them have acquired an arithmetic vocabulary of about 250 words.²

There are at least four ingredients in every child's personality which affect his efficiency in learning any skill, arithmetic included. These ingredients are ability, desire, experience, and temperament. Standardized tests can provide information on at least two of these ingredients, namely, ability and experience. Today's multiple measure intelligence tests, of which the *SRA—Primary Mental Abilities Test*³ is a good illustration, are based on a recognition of these differences in ability, ex-

perience, and training. Intelligence is not a unitary trait. Two equally intelligent children may be good at altogether different tasks because of variation in the mental abilities that contribute to their intelligence.⁴ These different kinds of mental ability were named the primary mental abilities by L. L. Thurstone⁵ at The University of Chicago. Through research over a period of more than twenty years he has brought forth strong evidence to show that children of all ages are possessed of at least eight primary mental abilities which have an impact upon the direction of their efforts and the success of their accomplishments:

Quantitative thinking — Q — is the ability to understand numbers and to recognize quantitative differences. It is significant at the primary level and research indicates that as a child matures his reasoning and number facility abilities evolve from his quantitative understandings.

Reasoning — R — is the ability to solve logical problems, to foresee, and to plan on the basis of past experience and recognized facts.

Number facility — N — is the ability to work with numbers. It involves accuracy and speed in using numbers.

Space — S — is the ability to visualize objects dimensionally and to imagine how a figure will look when it is rotated. It is difficult to describe verbally because it has no concern with words, except for the one who tries to park his car in just not enough space and then the words used are colorful, indeed.

Perception — P — is the ability to locate details quickly and accurately. It is one of the

¹Chicago Public Schools

²*Elementary School Objectives*. New York: Russell Sage Foundation, 1953.

³By L. L. and T. G. Thurstone. Chicago: Science Research Associates, Inc., 1953.

⁴*Mental Abilities of Children*. Chicago: Science Research Associates, 1952.

⁵Now Director of the Psychometric Laboratory of the University of North Carolina.

abilities used as an index to reading readiness in first grade.

Verbal meaning—V—is the ability to understand ideas expressed in words. The V score is used as an index to reading readiness in the first grade. Intelligent listening and reading depend upon verbal meaning ability.

Memory—M—is the ability to recall past experiences.

Motor—Mo—is the ability to co-ordinate eye and hand.

Word fluency—W—is the ability to write and talk easily.

INTERPRETATION NEEDED

Now if we administer and score a test such as the primary mental abilities and take only the total score, a wealth of information remains unrevealed. Of the primary mental abilities described herein four are of special significance in the prediction of readiness for and of successful arithmetic achievement. They are the quantitative thinking, number facility, reasoning, and space abilities. In the primary grades the Q score is the one to consider. In the middle grades the R and N scores are the important ones. At the fourth-grade level there is a close correspondence between the average of a student's R and N scores and his total grade level score on the *Chicago Arithmetic Survey Test*. The following class medians illustrate this correspondence:

GROUP OF 31 4B STUDENTS

Median total score—Chicago Arithmetic Survey Test	5.1
Median PMA reasoning score	5.5
Median PMA number facility	4.5
Median average of R and N scores	5.2

GROUP OF 52 4B STUDENTS

Median total score—Chicago Arithmetic Survey Test	3.6
Median PMA reasoning score	3.8
Median PMA number facility	3.5
Median average of R and N scores	3.7

By the eighth grade, space ability becomes significant in the prediction of success in mathematics.

Children scoring high in reasoning and number facility are likely to be good students in arithmetic. Children scoring high in number facility but low in reasoning are apt to require more than the usual

amount of assistance in learning to solve arithmetic problems. Children scoring low in number facility but high in reasoning seem to need training which emphasizes exactness and accuracy in the fundamentals. If the low number facility score can be attributed to slowness of performance rather than to inaccuracy, attention directed toward the development of speed should help the child improve.

Should two boys having the same mental age do equally well on an arithmetic test? Take the case of Tom and Joe, two bright boys in the same 4B classroom, both having mental ages of ten years and six months, according to their total scores on the *Primary Mental Abilities Test*. They had a teacher who was too busy to look at more than the total score and naturally when she saw a mental age of 10-6 on both of their tests she felt justified in expecting them to do equally well on the arithmetic test. But they didn't and she was disappointed; one of the boys began to feel that he was more than a bit short on something important. Joe had a total grade-level score of 5.3 on the arithmetic test⁶ and Tom scored only 4.0. Now if the teacher had taken just a little time to study the scores of each of the primary mental abilities of both boys she would have seen something like this:

JOE		Age	Grade
Mental Abilities		Score	Score
Verbal Meaning		11-3	6.3
Space		8-9	3.8
Reasoning		10-3	5.3
Perception		9-6	4.5
Number facility		10-6	5.5
Average R and N		10-5	5.4
Chicago Arithmetic Survey Test			5.2
TOM			
Verbal Meaning		11-3	6.3
Space		14-0	9.0
Reasoning		9-6	4.5
Perception		9-3	4.3
Number facility		8-9	3.8
Average R and N		9-2	4.2
Chicago Arithmetic Survey Test			4.0

⁶The *Chicago Arithmetic Survey Tests*, A2. Chicago: The King Company.

Joe's and Tom's arithmetic scores are in accord with their R and N abilities. Being accurate but slow in his performance on the number facility test gives us reason to believe that Tom could achieve greater speed with a little practice. His very high space score is indicative of a rare gift. He may have a talent that could make mathematical success easier for him than it is for most students in high school and college. There are many Toms and Joes with the same mental age but each one is different and each one arrives at his own total score in his own unique way and that way is the right way for him.

What does a test score tell us? Theoretically, the raw test score can be converted by reference to a table in the manual of directions into an age-level score which in turn can be converted into a grade-level score. That age-grade-level score is presented on the assumption that a particular child's performance has been similar to that of the so-called average child. The assumption is that this particular child completed successfully all the parts of a test up to a certain point. Now if the child being judged did that the age-grade-level score assigned to him is probably close to the truth. However, the odds are powerfully strong that he did not do that. Chances are better that he had an irregular, unique pattern of success typical of himself and not typical of anyone else, even the so-called average child. It is very possible that the arithmetic grade-level score assigned to a child by his total score on a standardized test can not be translated into satisfactory placement in an arithmetic text.

Suppose that we have a test which has within it six or seven subtests. Surely that solves the problem of diagnosis. Well we fooled ourselves into believing that it did for a time, but surely it does not. It does not for at least one good reason, which is the same as that for the total score. The individual child is more frequently unique rather than typical. It is almost an assured

truth that the raw scores on the subtests can not be taken at their face value. By this time you are asking, "What shall we do? We can not trust the total score and we can not trust the subtest scores." Imagine starting out on a trip in your car with a motor club map in your pocket, and then, you study only the outside of the folded map! That may sound absurd to you but that is just what we have been doing with standardized tests. It is really time that we look at the inside pages of a test to see what we can learn.

Take the case of Fred, another very bright fourth-grade boy. He seems headed for trouble if ever a boy was unless someone makes him aware of what speed and inaccuracy are doing to his work. A quick glance at the 5.0 grade-level score might satisfy one that he is doing satisfactorily in arithmetic since he is only in grade 4B. Of course we are looking at the outside of the folded map only, and we are not remembering that he has unusual ability in both reasoning and number fluency. When we look at the inside pages of his arithmetic test we see that he did correctly two of the number meaning problems and that he missed the point on the others because of rapid, careless reading. Looking at the reasoning problems we see that he did the same thing there, not because he can not read but because he is careless. He did every problem in the test booklet but he missed at least a third of them unnecessarily. He likes to read and he is a rapid reader who covers a large quantity of material in a short time but he proceeds with hops, skips, and jumps which overlook many of the details that make for good mathematical reading.

Investigating further we find that on the addition problems Fred made mistakes on numbers one, three, five, and six, but he did correctly two, four, seven, and eight. Since the skill problems on this test⁷ are progressive in difficulty, with each problem introducing a new step in the process,

⁷Ibid

competence on the eighth one in the series can not be achieved without mastery of the first seven steps. Fred's raw score of four on the addition test placed him at a 4B level in addition but his ability to do the eighth problem indicates a 5A performance. Fred's zig-zag path on the map suggests that he had better cut down on his speed and "try to make haste more slowly."

Study the standardized test carefully because it can serve as a "two-bit mechanical device" substituting for a highly priced diagnostician, and this comment is not meant to belittle the diagnosticians, of

which the writer is one. It takes about fifty minutes from a child's learning time to administer this device which discovers facts that the teacher would have to find out for herself in a much more time-consuming way. We are reaching a stage of sophistication in the use of tests when we can no longer be satisfied with simple total scores and single-measure tests. And that is good because it means that we are improving. It has been said that an ounce of prevention is better than a pound of cure, and it might be said that a test in time may help in applying the ounce.

CHICAGO—MEAT PACKING CENTER

CHARLES E. HUGHES

ARMOUR AND COMPANY

CHICAGO and the meat processing industry go together like ham and eggs. The industry in 1840 was a lusty infant when Chicago still wore swaddling clothes, a town of slightly over 4,000. And together they grew up and reached their present stature.

Today, meat processing still is one of Chicago's largest industries, providing employment for more than 40,000. Enough meat is processed in one year by an estimated 75 packing and sausage-making firms to furnish a five-week supply for the entire United States. The general offices for three of the four leading packers are located in Chicago.

Chicago is the capital of an industry that vies with steel and automobile manufacturing for top rung on America's industrial ladder. The nation's approximately 4,000 plants last year did more than 11 billion dollars worth of business. No other industry gives so much service to so many people for such a small profit as the meat packing industry! This fact is not generally known and appreciated. During the last twenty-seven years, meat packers have averaged net earnings of a

little better than one cent per dollar of sales. In the same period other principal manufacturing corporations have averaged nearly five cents on the sales dollar.

The Chicago Union Stock Yards, source of livestock for the packers, is the largest in the world. The yards cover an area of one-half square mile and have 13,000 pens, 35 miles of cattle alleys, and 5 miles of hog alleys. The dollar volume of business for 1952 (latest year available) was \$778,638,836; in 1953 the live receipts of various classes of livestock were as follows: cattle, 2,294,793; calves, 122,172; hogs, 3,187,023; sheep and lambs, 834,993. Sometime during the first half of 1954, the billionth animal since the opening of the yards will be marketed at the Chicago Union Stock Yards.

Animals sent to the Chicago market are unloaded from trucks and trains in the early morning, sorted according to grades, and driven into pens. Commission men who act as the owners' agents invite buyers, one at a time, into the pens to bid on the livestock. Any bid or offer made in the pen is usually cancelled when the buyer leaves, if a sale has not been agreed



On Their Way!

upon. When a buyer and commission man reach an agreement, the sale is completed, the animals weighed, and payment is made on the basis of the weight and the agreed price. The livestock producer pays a fee for the services of the commission man and for the use of the yards. Many buyers are found on the Chicago market. Besides representatives of the local packers, there are order buyers for packers in other cities and speculators who buy with the idea of reselling locally or at some other market.

Animals may be slaughtered on the same day they are acquired by a packer, or they may be held for a few days in the yards, depending on the schedule of operations at the packing plant and the supply of animals coming to market. After being weighed when they are sold, cattle are driven to the slaughter house—usually the top floor of the packing plant. After a rest period, they are stunned with a blow on the head and then strung up and bled. In quick succession, they are skinned, eviscerated, split into halves, trimmed, washed, shrouded (covered with heavy muslin), and moved into chill rooms where temperatures are maintained just above the freezing point, and where the animal heat is dissipated. After twenty-four to forty-eight hours in the chill room,

they are ready for shipment in refrigerator railroad cars or refrigerated trucks.

Hogs are allowed to rest briefly after reaching the packing plant and are slaughtered by a “sticker” who severs the large blood vessels in the throat with a deft knife thrust. After a short period on the bleeding rail, the carcasses drop into scalding vats and then go into a dehairing machine from which they emerge white and



Cattle Dressing Floor

clean. They move on a chain past butcher workmen, each of whom performs a single dressing operation. The carcasses, split into halves, are moved into chill rooms about half an hour after the live animals reach the sticker.

Sheep and calves are slaughtered in much the same manner as hogs. In the case of sheep and lambs, the removal of the pelt calls for care and skill so that the wool will not touch the meat and cause an off flavor.

Much of the nation's meat supply moves from the packing plants through the retail stores in a fresh state. Substantial quantities of meats, however, are cured, canned, frozen, or made into sausage.

GROWTH OF THE INDUSTRY

Not always has Chicago been the recognized center of the nation's meat packing industry. It is believed that Captain John Pynchon of Springfield, Massachu-

setts, was America's first genuine meat packer, for in 1641 he packed beef, pork, venison, and bear meat in salt. His efforts were copied by numerous others in New England, where the industry flourished during the colonial period. Its business was to salt, smoke, and pack meat in barrels or boxes for use in seafaring towns.

But the industry did not take on the characteristic of greatness until after the Revolutionary War, when the hardy pioneers pushed through the wilderness and spread across the fertile valley of the Ohio River. For a time, hogs produced on these midwestern farm clearings often were driven hundreds of miles to eastern cities for slaughter. It is easy to understand why such a practice would be unsatisfactory. Accordingly, with the further growth of population, a meat packing center took

water routes, and by proximity to an ever-increasing number of livestock-producing farms.

The Chicago meat packing business supposedly had its beginning in 1827 when Archibald Clybourn built a small slaughter house on his farm along the north branch of the Chicago River. His chief outlet was a contract to supply fresh meat for troops stationed at Fort Dearborn. It was not too long before others saw the possibilities, and by 1836 the need arose for a stockyards to serve these interests. The first one, established in 1836, was founded by Willard F. Myrick, near 29th Street and Cottage Grove Avenue. Mr. Myrick built a tavern to serve the drovers bringing hogs from the Wabash Valley of Indiana, and the trail they followed later was named Wabash Avenue.

By 1865 the city of Chicago boasted of seven stockyards, but the situation was unsatisfactory for nearly everyone concerned. Livestock buyers grew weary of going from yard to yard to procure animals for a daily kill. The railroads found their costs mounting because of the need



Ham Trees On Way to Smokehouse

root in Cincinnati, favorably located for water and rail transportation, where for several decades the business pyramided to a point where the town was nicknamed "Porkopolis."

But 300 miles to the northwest was another meat packing center which for several decades was second to the Cincinnati operation. It was not until the early years of the War-between-the-States that Cincinnati lost its early lead to Chicago, which was favored by expanding rail and



Automatic Filling Machine



Armour's New Products Kitchen

for shunting cars from one yard to another. Farmers complained about the wide and unaccountable differences in prices paid from yard to yard at the same moment.

Thinking began to crystallize in 1864, when John B. Sherman, lessee of the Myrick Yards, spearheaded a movement toward establishing a centrally located stockyards. Preliminary efforts bore fruit in 1865 through acquisition of a 320-acre tract of swampy land bound by Halsted, Center (now Racine), 39th, and 47th Streets. The land was purchased from Congressman John Wentworth for \$100,000 from a million-dollar fund raised principally by the railroads. However these interests soon discovered that the original sum was only a good beginning, for expenditures soon reached the \$1,700,000 point. Expansion for a short time came to a near halt, but John Sherman returned from retirement to push the project through to a successful conclusion.

Christmas Day, 1865, was a momentous occasion in Chicago history, for it marked the opening of the new central stockyards. It might be said also that this occasion

soon led to the emergence of several of the larger packing concerns familiar to the general public today.

Philip D. Armour, founder of one of these concerns, was brought up on a farm in New York State. As a very young man, he went to California in the 1849 Gold Rush. There he made a few thousand dollars, not by mining for gold but by supplying the miners. Returning to the Middle West, Mr. Armour in 1863 joined John Plankinton in Milwaukee in the pork packing business, and in 1867 he founded Armour and Company in Chicago. He set up his first plant in the packing district centering about Archer Avenue, and a year or two later joined the general movement of packers to a 320-acre tract next to the stockyards area, later to be known as Packingtown.

Another major meat processing firm, Swift and Company, had its beginning in 1875 when Gustavus F. Swift, a native of Massachusetts, came to Chicago. Within two years he was on his own, using a large wooden shed located at the site of Swift's present lard refinery.

Both Swift and Armour were leaders in attacking a problem that plagued all the meat packers, a problem that seriously limited their potentialities. This was the high cost of shipping live cattle to eastern markets. Dressed meat could be shipped at some risk in the winter time, but this traffic stopped during the summer months. The absurdity of shipping a live steer, which would yield less than 60 per cent of edible meat, was growing increasingly apparent.

REFRIGERATOR CARS

These early-day packers perceived the value of refrigerator cars, and they worked hard to perfect them. After considerable experimentation, commencing about 1875, refrigerator cars began to make their appearance in small numbers in the early 1880's. But many problems remained to be solved. For one, letting the meat touch the ice caused the meat to lose color and

spoil soon after removal from the car. To overcome this, cars were built in which the beef quarters were suspended from the ceiling of the car. Trouble followed, for the loosely hung quarters developed a swaying motion on sharp curves, causing several train wrecks. Another obstacle reared its head — jealousy of eastern markets over the spectacular rise of midwestern meat processing. Soon there was an overwhelming prejudice against western meat, which, according to rumors, suffered a loss of quality during the journey. However, the western meat packers refused to be thwarted by these obstacles, which eventually were surmounted.

Early natural ice refrigeration was replaced in time by mechanical refrigeration in the packing plants. Shipment of fresh meats increased rapidly. With these improvements came some changes in the reasons for curing meats. For instance, hams



Examination by Federal Inspection

and bacon today are cured to bring out their flavor rather than to preserve them.

Because of the availability of refrigerator cars, along with the development of branch houses (connecting links between packing plants and consuming centers), the packers began processing and marketing butter, eggs, cheese, and poultry. These foods are sometimes referred to as "by-products of distribution" in the packing industry.

In the wake of these developments came other packers, many small even today but others which have attained gigantic proportions. In the 1880's, Thomas E. Wilson started working as a clerk for the Chicago, Burlington, and Quincy Railway Com-

pany and before long found a job as a car checker for the meat packing firm of Morris and Company. His ability and willingness eventually elevated him into a vice-presidency, and later to presidency of the firm. There he stayed until 1916 when he left Morris to found Wilson and Company.

Meat canning began in the 1870's. The principal product at first was canned



Filling Sterile Vials With ACTH

corned beef and the principal reason for canning was to preserve the meat. Modern canned meats tend toward "Meal in a Can" dishes (and are popular mainly for their convenience. Beef stew, corned beef hash, chopped ham and lunch meat, chili, and various types of sausages are among the scores of varieties of canned meats found in the average store.

Freezing of meat has been practiced in the packing plants for many years. Beef and pork to be used in sausages, uncured hams and bacon, liver and other variety meats were frozen in the fall and winter when supplies were plentiful and used in the summer when the number of livestock coming to market declined.

Shortly before World War II, however, quick freezing processes were developed which represented a great step forward in improving our meat supply. Temperatures as low as 50 degrees below zero are



Livestock National Bank of Chicago



Stock Yard Inn

used for freezing, and the frozen meats are marketed in consumer packages.

It was only natural that meat packers would get into the lard, shortening, margarine, and oil businesses, for these products are made from fats which are highly important foods. They come from both animal and vegetable sources and are used for table spreads and in practically all baking goods, in vegetables and salads, and in frying. In 1880, meat packers started making shortening and also oleo-margarine, which got its name from oleo oil made from beef fat. The oleo oil was churned with milk to produce a table spread with a milk flavor. The modern name for the product is margarine and it is made almost entirely from vegetable oils.

BY-PRODUCTS IMPORTANT

It has been previously stated that in the earlier days of the packing industry little use was found for anything but the edible meats. The changes that since have occurred stagger the imagination. Meat animals today provide us not only with food

but with many other articles which we use every day. The glue in your chair, the wool in your clothes, your leather shoes, the soap that you use, the hair in upholstery and mattresses — all are animal products. Add to this list such items as glycerine, surgical ligatures, and animal feeds. In no line of industry has science worked a more wonderful transformation during the past half century than in the utilization of the by-products of meat packing. At first, the inedible parts of meat animals were simply destroyed by the packers in the least objectionable manner possible. But in 1880 chemists were employed by packing plants; their chief job was to reduce the waste evil. Not only did they do this, but their research has accomplished many things that dwarf the original reason for their employment.

Another big field of development is in drugs of animal origin. The new wonder drug, ACTH, is an example. It is made from the tiny pituitary gland found in the heads of all animals. ACTH has helped people suffering from arthritis, rheumatic heart disease, severe burns, asthma, and a score of other diseases. Other medicines are made from animal liver, thyroid, pancreas, adrenal, and other glands.

Still another big field is the manufacture of chemicals from inedible animal fats. These chemicals are used in producing a series of useful products such as synthetic soaps, solvents, wetting and drying agents, paints, polishes, dyes, and germicides.

And so, like the city of Chicago, the meat packing business has enjoyed a colorful and turbulent growth. Certainly the industry has earned its present place in the economic scheme of things.

American wealth and power are due not only to what our forefathers found here but to the qualities and efforts they have applied to their inheritance.

— Herold C. Hunt

THE PATRIOTIC ENVIRONMENT¹

Of Our Chicago Public Schools

DON C. ROGERS

ASSISTANT SUPERINTENDENT OF SCHOOLS²

THREE hundred thousand Chicago public elementary school boys and girls attend school in a patriotic environment designed to develop in them a love for our country. Let me describe this environment.

First of all, these kindergarten to eighth grade youngsters attend school in a building over which a large flag of the United States of America flies every day of the school year. The building itself probably bears the honored name of some such distinguished personage as Daniel Boone, Benjamin Franklin, Ulysses S. Grant, Nathan Hale, Thomas Jefferson, Frances Scott Key, Abraham Lincoln, Paul Revere, George Washington, or other national, state, or local pioneers and heroes. As the children walk down the corridors to their classrooms, they may see historic murals and inspiring paintings or statues of men and women whose lives have been worth emulating, such as Jane Addams, Alexander Graham Bell, Henry Clay, Charles R. Darwin, Ralph Waldo Emerson, Eugene Field, Alexander Hamilton, Joyce Kilmer, John Marshall, Casimir Pulaski, Betsy Ross, Harriet Beecher Stowe, Daniel Webster, or Ella Flagg Young. As the children enter the classroom and take their seats, they are in the presence of a small flag of the United States of America which is displayed at all times in our 8,000 elementary school classrooms. Such is the physical environment in which our boys and girls attend school.

Instructional activities, too, are carried on in an atmosphere of patriotism. The first daily activity in every classroom is for the pupils, led by their teacher, to repeat, "I pledge allegiance to the flag of

the United States of America, and to the Republic for which it stands, one nation indivisible, with liberty and justice for all." This is done 190 times a year by 300,000 pupils and teachers, a grand total of 57 million loyalty oaths a year.

The second daily activity in every classroom is for the pupils and teacher to sing in unison "The Star Spangled Banner" or "America" — 57 million times a year.

Chicago schools use carefully-selected textbooks. Twenty-four committees of veteran principals and teachers study sample copies of textbooks and evaluate them for possible inclusion on an approved list. These committees use a check list with thirty-four criteria for evaluation. One of the thirty-four criteria is as follows: "Does the material (in the book) present a wholesome picture of the American way of life in our democracy?" You may be sure that books are so carefully screened before placement on the approved list that they are above reproach. The approved list includes fifty-five history textbooks with such titles as *Story of American Freedom*, *Rise of Our Free Nation*, *History of Young America*.

The approved civics textbooks include *You and the Constitution of the United States*, *Our Constitution and What it Means*, *Our Civic Life and Progress*, and eight others. Even the readers frequently include stories about the Declaration of Independence, The Mayflower Compact; Heroes of Our Navy; Freedom of Speech, Press, Worship, and others. The library shelves are filled with biographies of great Americans, such as Benjamin Franklin,

¹A speech given at the fifty-seventh Annual Dinner of the Society of Mayflower Descendants, Blackstone Hotel, November 19, 1953.

²In Charge of Elementary Education

George Washington, Thomas Jefferson, Abraham Lincoln, and others.

Many times during the school year, averaging at least once a month, the school conducts an assembly hall program built around some patriotic incident of American history; for example, the Discovery of America (Columbus Day), Armistice Day, Mayflower Compact, Thanksgiving, Brotherhood Week, Washington's and Lincoln's birthdays, and Memorial Day.

Practically every school has a student council. Among the projects carried on by the young citizens are those dealing with elections and voting, anti-vandalism, and many others which prepare for responsible citizenship.

TEACHERS HAVE HIGH CIVIC IDEALS

Finally there is the teacher. The typical teacher is a super citizen. She is a product of the same patriotic environment which surrounds our school children. She herself has attended school for nine years in the elementary grades (kindergarten to eighth grade), four years in a secondary school, and four or five years in an institution of higher learning. Before becoming a Chicago public school teacher, she must have passed a series of written examinations in many subjects, an oral interview examination which includes an evaluation of her background and personality, and a health examination. If she is successful in passing this three-part screening examination, and is assigned as a classroom teacher, she is still under probation for a three-year period.

Chicago teachers once received an unintentional compliment from an unusual source, from a Communist. During the depths of the Depression of the 1930s when the Chicago teachers had served a full year without pay (without cash, script,

or tax warrants) a Communist denounced them and recommended that they should never receive their back pay. He stated as the reason for his recommendation that the traditional things which teachers teach to children, such as the right of private property, thrift, and respect for the flag, are not worth paying for. He declared that such teachings are delaying the introduction of a new and more just social order and that the teachers are holding the last trench in the defense of the capitalists.

On the other hand, employers believe that the schools are doing a good job in training young people for citizenship. Recently the Association of Commerce and Industry in New York conducted a survey among 288 firms in 15 industries employing 32,000 high school graduates and non-graduates. In the opinion of these employers, the schools are teaching the responsibilities of citizenship the best of any subject being taught. These findings are reported in the October, 1953, issue of *Better Homes and Gardens*.

You may be certain that your children are in splendid hands. The typical teacher is well-trained, experienced, of good personality, and of high civic ideals.

It is a fundamental tenet of the Chicago public school philosophy that our schools serve all the children of all the people of our great city. During the elementary school years, every one of these youngsters has personally pledged allegiance to the flag of the United States of America more than 1,500 times, and more than 1,500 times has sung about "The Land of the Free and the Home of the Brave," or "My Country 'Tis of Thee, Sweet Land of Liberty."

In such a patriotic environment as we have in the Chicago public schools, our boys and girls have every opportunity to develop into responsible citizens, imbued with an instinctive love for their country.



Martha-Mary Chapel, A Typical Colonial Church

EDUCATION IN 3-D¹

VERNON DAMERON²

THE HENRY FORD MUSEUM AND GREENFIELD VILLAGE

AFTER many years of painstaking research, three-dimensional motion pictures finally have become a practical reality. In contrast to the real-life appearances of the product of this modern development, the very term "museum" tends to conjure an impression of a static collection of drab "antiques." It is interesting to reflect, however, that the 3-D shadows on the theatrical screen are a far cry from the innate reality of the 3-D objects at the Henry Ford Museum and Greenfield Village!

The Museum and Village are not strangers to the teachers of the Middle West. More than 2,000 school groups visit here each year. They come to Dearborn from all parts of Michigan and the nearby areas of Illinois and other adjacent states. It was recognition of the rapidly growing use of the Museum and Village resources which prompted establishment of the education department about eighteen months ago. The department's goal is to fulfill its keenly-sensed obligation to provide more and better educational activities and services, especially for teachers, wherever they may be located.

The Museum and Village are, first and foremost, educational institutions. Their objective is to show how the people of this nation have lived and worked, from early colonial days to the recent past, and to tell the story of their inventions and accomplishments. It is small wonder, therefore, that this dual institution has countless stories to tell school children in practically every subject-matter field, especially in the broad range of content of the physical sciences and social studies.

From the organizational standpoint, the Museum, the Village, and the schools comprise a single administrative unit. The education department is responsible for

the educational program of the Museum and Village, and for the administration and operation of the school system.

Although founded by Henry Ford, the institution is not a part of the Ford Motor Company. It is a non-profit educational institution, chartered as the Edison Institute. All of our educational activities and services, therefore, are being made available either at nominal cost or free-of-charge.

THE MUSEUM

This is primarily a historical museum of the mechanical arts, although it also includes an extensive fine arts section. The building covers an area of fourteen acres. The collections have been acclaimed nationally as pre-eminent in both variety and scope. The façade of the building consists of exact architectural reproductions of Independence Hall, Congress Hall, and the old City Hall of Philadelphia. The exhibits are in four main divisions:

1. Mechanical Arts—Dedicated to agriculture, crafts, machinery, power equipment, communications, lighting, and transportation. This vast eight-acre area comprises a world-renowned, awe-inspiring assemblage of the three-dimensional results of American ingenuity and inventive genius, ranging from tiny radio tubes to trains and planes.
2. Fine Arts—Includes furniture, "period rooms," and extensive collections of ceramics, pewter, silver, porcelain and enamel ware, Currier and Ives prints, coins and currency, and a recently-established Indian exhibit which is quite extensive and representative of a number of North American Indian cultures.
3. Street of Shops—Consists of twenty-two completely furnished and equipped separate shops, representative of the crafts and trades of pre-industrial America.

¹Photographs courtesy of The Henry Ford Museum and Greenfield Village, Dearborn, Michigan.

²Director of Education



Cotswold Cottage



Logan County Courthouse



Greenfield Village and Museum



Steamer Suwanee

4. Henry Ford: A Personal History — This recent addition, occupying seven rooms on the second floor, is dedicated to the founder of the institution.

GREENFIELD VILLAGE

Greenfield Village is a unique outdoor "museum," occupying a 200-acre tract and consisting of nearly 100 original and reconstructed buildings of historical interest and significance. It is not intended to represent any particular village of a specific era, although the buildings are generally representative of the early 1800's.

The homes of several famous Americans have been restored and reconstructed in the Village. The birthplace of William H. McGuffey of "eclectic reader" fame is here. It is an excellent example of a pioneer home of western Pennsylvania. Completely different in style and elegance is the home of Noah Webster, a stately residence which has been brought to Dearborn from New Haven, Connecticut. The impressive façade reminds the visitor of Federalist New England. It was here that the famous compiler of the first American dictionary worked and lived for many years. An interesting feature of the Webster house is a "sound conditioned" study. Nearby is another famous old New England home — the Secretary House from Exeter, New Hampshire. It was built by

a New England merchant and trader at a time when the American colonists looked to the sea for their livelihood. There are also other homes from Massachusetts, Maryland, Georgia, and Michigan.

Three important groups of buildings in the Village are those dedicated to Thomas Edison, Wilbur and Orville Wright, and Henry Ford. All of them feature the workshops of these famous Americans who did so much to change our way of living. At the Menlo Park laboratories of Edison one may see a meticulous reconstruction of the frame buildings where the famous inventor brought forth his most important contributions to progress. They are completely equipped with the machines and devices he used in his work. To make them appear as they did in the 1870's, even carloads of reddish New Jersey clay was brought to Dearborn. Nearby is the Dayton, Ohio, home of the Wright brothers along with the Wright Cycle Shop. Here,



A Crude Oxcart



An Early English Steam Engine

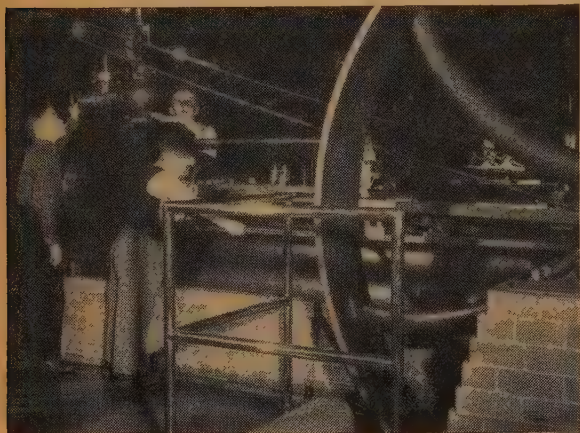
the two famous inventors and scientists constructed a wind tunnel which revealed to them and the world the principle of human flight. A replica of the tunnel operates in the back room of the cycle shop today as it did at the turn of the century. Then the visitor may step inside the midwestern farmhouse of the Civil War period where Henry Ford was born. It is complete with horsehair fur-

niture and kerosene lamps. Also in Greenfield Village is the shed where the famous industrialist worked until early morning assembling his first "horseless carriage."

An original building of particular interest to Illinoisans is the Logan County Courthouse. Abraham Lincoln practiced law in this rough but sturdy clapboard structure from Central Illinois. The oak and walnut timbers were brought piece by



School Groups Visit Greenfield Village



A Power Engine of 1800

piece to Greenfield Village where each board was carefully treated with a preservative to insure against decay. In this building, the visitor steps into the restored setting of a courtroom of the 1840's.

Nineteenth century America was an industrious and expanding nation. Greenfield Village recaptures some of the spirit of this age in the restored shops, stores, and factories which one may visit today. Included are various trades such as shoe-making, coopering, blacksmithing, glass-making, silk manufacturing, wool carding, printing, and milling. But the most important center of trade in the America of yesterday was the general store. In Greenfield Village the Waterford store is a splendid example of a typical "country" business establishment of the "pre-supermarket" era. Each shelf is a chapter in the story of how Americans worked and lived in the past. Here one may see a seemingly endless variety of goods both

strange and familiar. Oil lamps and patent medicines are lined up with bustles and scythes. Only the neighbors who gathered around the cracker barrel and the pot-bellied stove to exchange news and gossip are missing from the scene.

The heart of the American village of yesterday was the town square or common. The center of Greenfield Village is the "village green." Here, towering above the neighboring buildings, is the tall spire of the Martha-Mary Chapel, a replica of a Christopher Wren church. Across the open green is a town hall with its classical pillars and broad steps. Nearby is a post office and a red brick school. The Clinton Inn completes the group. Built in 1832, it was a famous hostelry in its day. This inn was a stop for the stagecoach line operating between Detroit and Chicago. It was also the town's social center with its taproom, kitchen, and ballroom. The latter was a unique attraction in the Clinton Inn's heyday, for it had a "swinging floor" which swayed when the dancers crowded on it.

Greenfield Village stands today not as a typical example of a particular community of the past, but rather as a cross section of American life as lived in many yesterdays in many parts of our nation. It serves to stimulate in us an appreciation of our American heritage.

VILLAGE SCHOOLS

Associated with the Village and Museum is a private, tuition-free school

system with classes from kindergarten through the sixth grade. There are approximately 150 pupils, all selected from the West Dearborn area. The curriculum of the schools is quite similar to that of any modern school, with the addition of close integration of the resources of the Museum and Village. A program of experimental research, involving participation of the pupils, has been established recently.



Restored Birthplace of McGuffey

A number of the buildings seen on a Village tour are used as classrooms. They include the McGuffey, Scotch Settlement, Miller, and Town Hall Schools; the Ann Arbor House; and the Grimm Jewelry Store. During the school year, these buildings are closed to visitors.

VISITS BY SCHOOL GROUPS

Both the Museum and Village are open the year around. The usual type of general tour of the Village requires approximately two hours. In the Museum, although one is free to spend as much time as desired, at least one hour and a half should be allowed for seeing even the highlights of the major sections of the exhibits.

Some teachers find it practical for their groups to visit either the Museum or Village in the morning, and then the other in the afternoon. Other teachers, however, have found that their pupils benefit more if visits to the Museum and Village are made on separate days. This latter plan enables a group to visit the Museum during the winter months, when distractions by tourists are at a minimum, and then to visit the Village during the more pleasant weather of spring or fall.

The advantages of concentrated study of a limited number of exhibits in the Museum or buildings in the Village are recognized by all educators. Teachers are therefore urged to contact us about the possibilities in this regard. For groups coming from as far as Chicago, however, it is quite understandable that they would expect to visit both the Museum and Village during one trip. It should be emphasized that we can accommodate school groups much more efficiently and effectively if teachers make advance reservations for their groups.

The exhibits of the Museum and Village are "living textbooks," but the full educational value of a field trip can be realized only when students have had some advance preparation, when their observations during the trip are directed by the teacher, and when follow-up discussions or projects are carried out.

MATERIALS FOR TEACHERS

Following are some of the more recent materials available for teachers:

1. *Handbook for Educational Groups*. This new publication is available without charge to all teachers upon request. It has been designed primarily for use in orienting school groups.
2. A filmstrip entitled *The Museum Is a Story*. Although intended for the late elementary grades, this filmstrip may also prove useful in junior high school. A print can be obtained by any audio-visual library, or it can be received by any teacher on a loan basis.
3. A large, colored map of Greenfield Village, suitable for posting in the classroom, is sent

to all teachers who make advance reservations for a field trip to the Village. An orientation filmstrip on the Village, to serve as a companion to the one on the Museum, will be available soon.

4. The education department issues a newsletter four times during the school year, calling attention to special exhibits and educational events at the Museum and Village, and announcing new instructional materials as they become available. Teachers and school administrators are invited to send us their names for inclusion on the mailing list.

Whenever possible, teachers who are not familiar with the exhibits are urged to visit the Museum and Village in advance of their field trips, so that they can plan for the most effective use of the resources. Teachers will be admitted upon proper identification without charge.

Teachers who desire detailed information about the Museum and Village can obtain a copy of the Museum guidebook

and of the Village guidebook, free of charge, upon request.

OVERNIGHT ACCOMMODATIONS AND MEALS

To make our resources more readily available to the more distant school groups, dormitory facilities, available at nominal cost, have been established in the Education Building. Reservations must be made and confirmed in advance. A student lunchroom, in the Education Building, is available for groups bringing their own lunches or purchasing them there.

"Traveling classrooms" prove to be an interesting and valuable educational experience for more than 100,000 school children who visit the Museum and Village each year. We hope that an increasing number of schools from beyond the boundaries of Michigan will find it possible to avail themselves of this adventure in education.

CLASSROOM OUT-OF-DOORS

ROBERTS MANN¹ AND ROLAND EISENBEIS²

FOREST PRESERVE DISTRICT OF COOK COUNTY

THE people of Chicago have a unique and priceless asset in the Forest Preserve District of Cook County. Nowhere in the United States is there such a great area of publicly-owned native landscape as fine, so easily accessible to a huge metropolitan population, and devoted to appropriate outdoor educational and recreational uses. From any point in Chicago, some part of the preserves can be reached in a 30-minute ride, or less, by chartered bus. The holdings now total 40,000 acres — 80 per cent of it wild land and 60 per cent of it forested — with picnic centers and other intensive-use areas on the highway borders. These holdings were acquired and, by law, are preserved "as nearly as may be, in their natural state and condition, for the education, pleasure, and recreation of the public."

It is significant that "education" is stipulated first, and that is the principal concern of our department in the District. We believe that the preserves can and should be used for that purpose by Chicago schools; they are being used by many suburban schools. We believe that field trips for nature study eventually should become an integral part of the curricula in the elementary grades, for biology classes in the high schools, and for pupils who are studying units of conservation.

PROBLEMS ENCOUNTERED

We are aware of the practical problems militating against excursions for nature study. Transportation is one; obtaining parental approval or consent is another; rearrangement of classroom schedules is

¹Conservation Editor

²Superintendent of Conservation



Looking for Frogs and Tadpoles

a third because a trip to the forest preserves, for optimum value and to justify the transportation cost, should consume at least half of a school day; the fourth and chief problem is leadership. It has been demonstrated that profitable nature trips can be made in the vicinity of many schools, even in the older, built-up sections of the city and in localities where no Chicago park is convenient, but it takes a gifted teacher or a naturalist to make them so.

Some schools are departmentalized and have a science teacher, trained in the biological sciences and natural history, to conduct field trips. In the many schools not departmentalized it naturally becomes the duty of the classroom teacher, who is perhaps assisted by an instructor in home mechanics who "doubles in science." The teacher may have had little or no formal training in natural history, limited outdoor experience, and be understandably reluctant to attempt such a job. Others, by temperament or for physical reasons, have no liking for rambles through the woods and fields, or along the shores of streams and marshes. The senior author

had two beloved aunts who taught school in Chicago and its suburbs for forty years. One was responsible for his lifelong interest in nature lore; the other was apathetic toward it.

For three years, as "Uncle Ezra," we gave weekly broadcasts on nature subjects over Station WBEZ of the Radio Council and studied their evaluations by teachers. One of our senior naturalists is an instructor in field biology courses given by the Chicago Teachers College. For five years, our naturalists have shown wildlife and natural history films, followed by question-and-answer periods, to assemblies in the Chicago schools. We have thus gained at least an idea and a sympathetic understanding of your problems.

It has become standard procedure in most schools to take short trips to museums, factories, dairies, bakeries, the stockyards, the Board of Trade, offices of municipal governments, and other places that give the pupil first-hand experiences in important features of this great metropolis that affect his daily life. These serve a genuinely educational purpose. We know of one school that has a co-ordinator who

makes all arrangements for approximately a hundred such excursions during each school year, including one to a large farm for each of several grades. However, when a class visits the Chicago Natural History Museum it is furnished with a trained guide and lecturer. The same is true in any museum, industrial plant, commercial establishment, or division of municipal government. Unfortunately, we can not do this in the Forest Preserve District. Our small staff is occupied with lectures and movies for assemblies in the Chicago and suburban schools, both public and

aration of the courses in science for the respective elementary grades: select a special committee of teachers to prepare such a manual, keeping it short and simple, with a bibliography. We would be glad to assist. There are some effective techniques and others to be avoided. The schools in New Castle, Indiana, have such a manual. We have two mimeographed publications which might help. One is an outline of our training course in field biology for day camp directors and counselors. The other, *Techniques of Outdoor Education*, was written for them also and



Dispelling False Notions About Snakes

parochial, and the conduct of training courses for teachers and leaders of youth groups to acquaint them with nature lore and the techniques of sharing it with children. Apparently, then, there is real need for a manual to assist teachers in planning and conducting field trips for nature study, which would increase both their benefits and their enjoyment.

SERVICES OFFERED

We are suggesting that the Division of Curriculum do what was done in the prep-

for the extra naturalists we employ to conduct nature walks in summer day camps.

Our own staff should prepare a guide to the Forest Preserve District listing, by name and location, the areas recommended for nature study programs at different seasons. This would indicate the picnic center adjacent to each area and its facilities, which may include a shelter and always includes a parking space, tested pure water for drinking purposes, sanitary conveniences, picnic tables, picnic

stoves, garbage receptacles, and usually an open space for games. It would define the general types of plant and animal life to be found in each area and any features of biological, topographical, geological, or historical importance.

A NATURALIST'S PARADISE

Many preserves have a wide variety of trees, shrubs, vines, and spring wildflowers; others are notable for certain species such as hard maples, giant oaks, hickories, sassafras, or redbud trees; some furnish outstanding displays of autumn color or great masses of hawthorns and wild crabapples blooming in spring; others have streams and lakes excellent for fishing; some have abundant populations of aquatic plants, muskrats, turtles, frogs, and aquatic insects; others are famous for the water fowl and shorebirds that nest there, or which rest and feed there in great numbers during the spring and fall migrations. With this information, a teacher could select the most convenient area for the type of program desired. Our Department of Conservation is always ready to assist in the selection of a site and to furnish advice or information by telephone or letter. Our office is in River Forest at 536 North Harlem Avenue, but we have a Chicago telephone, CO lumbus 1-8400.

In each of the many picnic centers used by 165 day camps last summer, we established one or more self-guiding nature trails — rather short loop trails, profusely labelled. The trees, shrubs, and vines, including poison ivy, were designated by large manila shipping tags on which we had stamped the name of each species and some of its prominent characteristics or uses. These suffered surprisingly little deterioration or vandalism. In October, one of the schools for crippled children took each grade on a bus trip to one of our Palos preserves. They toasted weenies on sticks and then, on crutches or in wheelchairs, followed the nature trail. Their poignant thank-you letters to the principal gave us a new conception of the

values of these labels. For the benefit of the general public and field trips by schools, we should establish such nature trails in all picnic centers, keep them up-to-date, and perhaps extend their scope to include other subjects, such as animal dens, ant hills, soils, rotting logs, and aquatic plants.

TECHNIQUES

To obtain the most benefit and enjoyment from a teacher-guided field trip, three phases are equally important: planning and preparation, the trip itself, and utilization. We believe in the modern technique of letting the children participate in the planning. A trip should have a primary theme which is frequently determined by a science unit in the curriculum. Within that theme the class, guided by the teacher, should decide what specific things to look for. Then comes the preparation: what clothes to wear, lunches, special equipment, and things to read about in advance.

The lower garments, at least, should be of hard-surfaced cloth, such as jeans or khaki to which burs will not cling, fully protecting the legs from scratches, thorns, and poison ivy. Galoshes, not rubbers, should be worn if animal tracks are to be observed along a muddy shore, or collections made of tadpoles, minnows, and aquatic insects or plants. It is not permissible to pick any wildflower and the children should understand why, but collections may be made of leaves for scrapbooks or for making leaf prints. These may be placed, and later pressed, between the pages of an old magazine. Each child should bring a wide-mouth jar or bottle with a perforated cover, for insects or aquatic animals. A jar of murky pond water and plants will later develop some surprising organisms. Butterfly nets and dipnets may be made, using old wire coat-hangers. We can tell you how cages for live insects can be easily made. Take paper sacks for acorns, milkweed pods, seeds, edible greens, and the like. Many children

fill their pockets with pebbles. They go home loaded. Good! Some of it can be used in the utilization phase. Some of it will become the nuclei of cherished collections. One purpose of such trips is to stimulate further exploration outside of school. Adventure, discovery, fun, and stimulation of individual hobbies or projects are among the chief values of an outdoor experience.



Day Campers With Naturalist

We are obliged to be brief about the techniques of conducting a field trip, although that is a vital factor and a problem to many teachers. The problem varies with the environmental background and economic status of the group. In settlement houses and schools in some sections of Chicago we have found hundreds of children who had never visited our forest preserves nor been outside the city limits. Such a group, on its first field trip, tends to explode and scatter like a covey of quail. Controlled, they have consuming curiosity and clamor to know "What's this? What's that?", but their interest span—especially in explanations—is short and their capacity for assimilation is very limited. With more experienced groups the problem is simpler.

It is almost impossible for one teacher or one naturalist to do a good job with forty or fifty children on a nature walk. If feasible, take not more than twenty-five

on a short, leisurely tour lasting only about thirty or forty minutes. If there is another teacher or leader present—we have even used the bus driver—the other children can be occupied with nature projects we have found instructive as well as fun. One, called "Life in the Soil," employs teams of two or more who count the living things found in successive one-inch layers of a square foot of soil.

On your tour, pass specimens around. A strong reading glass brings out interesting features of flowers, seeds, insects, and other small objects. We encourage children to feel, smell, or taste things and sometimes play games to test their sensory memories of what was observed and talked about on the trip. It is not necessary to name everything. If you do not know, point out the prominent characteristics of a specimen and say, "Let's take it back to school and see if we can find out what it is." Life histories—especially of animals, including insects; plant-animal relationships; and uses by man are more important than names. It may be heresy but we are satisfied if a child recognizes a bur oak merely as that tree having crooked, gnarled branches, an edible acorn with a mossy cap, big leaves with rounded lobes, and strong valuable wood. Almost inevitably, children will spy something exciting, such as a snake, a hawk, the remains of a bird or a rabbit, a groundhog den with several entrances, or a tree struck by lightning. Although the discovery may not be directly related to the main purpose of the trip, it is wise to stop right there and spend a little time discussing it.

On our field trips and in our Outdoor Workshops for Teachers we devote at least one trip to plant life and bring out the basic fact that plants are the most common and numerous things we see about us and that, directly or indirectly, they are the source of food and usually shelter for all animal life, including man himself. We devote another session to soils, soil life, and soil-plant-animal relationships but in a manner far less academic than that

sounds. A third trip is devoted to aquatic plants and animals and a fourth to land animals, including insects, and their homes. Whenever pertinent, we weave in a discussion of what constitutes good outdoor manners: what to do, what not to do, and why.

FOLLOW-UP

Turning now to the follow-up or utilization phase, the only recommendations we feel competent to make are those urged by teachers in some of the schools visited. Each pupil should write an account of the field trip, stressing what was observed, what was most interesting or the most fun, what new things were learned, and what he would like to see and do on another trip. These should be carefully studied for their evaluation of the techniques used and for what they reveal about the child. The pupil should be encouraged to look up more information about the subject that intrigued him most and perhaps write a theme about it.

The children themselves should establish the identification of such objects as were found unknown or questionable on the trip, and seek the answers to requests for additional information about others. It may be necessary to supplement the school library by obtaining some of the valuable publications issued free or at a nominal cost by the Illinois State Museum, the Illinois Department of Conservation, and the Illinois Natural History Survey. These include illustrated manuals about the trees, wildflowers, birds, mammals, insects, fish, reptiles, and geological history of Illinois. As a necessary part of their education, children should be taught where and how to look for information, including the use of indexes and tables of content. In our day, we did not learn that until we were in college.

The excursion provides the actual experiences which are essential to all true understanding and appreciation, and in addition provides them in a setting demanding the sort of social co-operation which all pupils must learn to give as members of organized society.

— Henry C. Atyeo

Classroom projects associated with field trips depend upon the interest and ingenuity of the teacher, as well as the pupils. Terraria, aquaria, insect cages, sprouting seeds and growing plants, cocoons, collections of insects, leaves, and rocks or artifacts, etcetera, have to be kept within reasonable limits, of course — sometimes by agreement with the school engineer and his janitors — but they are added dividends from these excursions in the forest preserves.

DIVIDENDS

We find that Chicago children are hungry for nature lore and outdoor experiences but many, being relatively or utter strangers in the out-of-doors, need to be made to feel at home there and have their eyes opened to what they can see, hear, touch, and taste. Field trips help bridge that gap between the classroom and things as they exist in nature. By making the child familiar with the flora, fauna, soils, mineral wealth, geological history, and human history of this region, field trips help him to realize his own dependence upon the land and why Chicago became the great city it is: the crossroads of America and the capital of the Midwest. Certainly history, civics, geology, and conservation, as well as natural science, will take on new life and meaning. He should therefore become a better citizen.

A by-product, for many, is a fuller, richer life with lasting interests and hobbies. Charles W. Eliot of Harvard said: "Nature is the greatest factor in the continuous education of men and women." That is why we subscribe to the dictum of Liberty Hyde Bailey: "Make children friends of things that grow. Unify into one organic whole a series of enterprises that are based upon the land."

NEW TEACHING AIDS

EDITED BY JOSEPH J. URBANCEK

CHICAGO TEACHERS COLLEGE

Contributors to this section are John M. Beck, Edward C. Colin, Henrietta H. Fernitz, Mabel G. Hemington, Louise M. Jacobs, Philip Lewis, Charles R. Monroe, George Pate, William J. Purcell, James M. Sanders, Mary Sanders, Margaret S. Sandine, and Sylvan D. Ward.

FILMS

The following are available from Coronet Instructional Films, 65 East South Water Street, Chicago 1, Illinois:

Using the Scientific Method. 16 mm sound. 12 minutes. Black and white, \$50; color, \$100. Teacher's Guide, 4 pp. This is an attempt to teach the scientific method through the dramatization of the solution of a problem arising in the home. A section of plaster has fallen from the wall of the bathroom. The adolescent son takes the job of repairing the wall. He is shown following the five steps listed explicitly in the film as constituting the scientific method: "1. Define the problem. 2. Collect information. 3. Form a trial answer. 4. Test the answer. 5. Revise the answer and test again." The film is adapted to students at the junior high school level, and as such it is interestingly and effectively worked out. E. C. C.

Harmony in Music. 16 mm sound. 13½ minutes. Black and white, \$62.50; color, \$125. The film starts with a small ensemble of school children playing the theme of Tchaikowsky's *Piano Concerto* on their instruments. Melody and harmony are introduced in this pleasing way and then analyzed with the use of supplementary flash cards and the assistance of a talented little pianist. An outstanding feature of the film is the close tie-up of the instrumental music with the vocal music. The same children do the singing and playing to prove that they can do both very satisfactorily. The sound track, however, is not entirely satisfying. The children were under the expert supervision of Traugott Rohner, Professor of Music at Northwestern University. S. D. W.

The following are available from McGraw-Hill Book Company, 330 West 42nd Street, New York 36, New York:

Design of American Public Education. 16 mm sound. 16 minutes. Black and white, \$80. Follow-up filmstrip, \$4.00. Correlated with textbook, *An Introduction to American Public*

Education, by Chris DeYoung. Dealing with concepts ordinarily difficult to put over in the classroom, the animated cartoon approach of this film, coupled with sound educational philosophy and expert direction, does much to overcome the usual barriers to understanding. Mass education treated as mass production is contrasted with the more desirable approach of mass education administered to care for individual needs. Autocratic administration loses face in light of the advantages shown for decentralized, democratic control of schools. The broad concept of learning—preparing the individual to fill his place in society in connection with the fullest realization of his potentialities—is the theme. Many of the filmstrip frames incorporate stimulating questions for discussion and review. P. L.

The School and the Community. 16 mm sound. Black and white, \$65; color, \$125. Follow-up filmstrip, \$4.00. Correlated with textbook, *An Introduction to American Public Education*, by Chris DeYoung. Following the same format as described for the companion film reviewed above, this presentation narrows its focus to deal with the problem of the school in the community versus the school as part of the community. Isolation and insulation of the educational institution from contemporary activities are shown to result in cultural atrophy. Conversely, the school that works with the community is vitalized by the interaction and has much of real value to offer its pupils. Education for economic competence, for civic responsibility, for social adjustment, and for better family living becomes significant in partnership-participation. The treatment is fast-moving but thorough, and the correlated filmstrip is well executed. P. L.

Allergies. 16 mm sound. 12 minutes. Black and white, \$50; color, \$100. Explains the relationship between allergens, shock organ or tissue, and release of histamine. Some types of allergic symptoms are given and various types of tests are indicated: scratch, patch, conjunctival, and injection. M. S.

The following are available from Encyclopedia Britannica Films, Inc., Wilmette, Illinois:

Life Along the Waterways. 16 mm sound. 11 minutes. Color, \$100. Beginning with the brook and continuing down to the sea, each segment of the developing stream provides a home for different plants and animals. Emphasis is placed on the community relationship of plants and animals. M. S.

Obesity. 16 mm sound. 12 minutes. Color, \$100. People differ in their physical characteristics; some become obese from overeating. At least one-fourth of the American population is 10 per cent overweight; the figures are higher in middle ages. The film shows how people overeat, how to reduce, and the dangers of obesity. M. S.

The following are available on free loan from Norfolk and Western Railway Company, Magazine and Advertising Department, Roanoke, Virginia:

The Modern Coal Burning Steam Locomotive. 16 mm sound. 31 minutes. Color. Shows types of steam locomotive, their construction, specifications, uses, coaling, watering, servicing, inspection, etcetera. There are beautiful scenery shots, some of which are panoramas, and much information on railroading. J. M. S.

The Power Behind the Nation. 16 mm sound. 31 minutes. Color. Covers the economic activities of the nation with considerable attention to natural resources, agriculture, emphasis on bituminous coal and its mining with scenes of industry, transportation, chemistry, and mining. Also shows loading of coal for trains and ships. Would make a companion film for *Powering America's Progress*. J. M. S.

FILMSTRIPS

The following are available from the Society for Visual Education, Inc., 1345 West Diversey Parkway, Chicago 14, Illinois:

Primary Graded Word Phrases — Level A. Speed-i-o-Strip Series. Four filmstrips, each containing two sets of 25 phrases. Black and white, \$8.00 per set. Complete manuals for teacher use. Groups 1 and 2, 50 frames, No. 112-1. Carefully graded word phrases, the first of which is "look away," the last, "did not call," to be used with primer and first grade groups; selected from leading basic readers and checked against well-known word lists for frequency and usage. Will create interest in word recognition; increase eye span, rate and comprehension of reading; and serve as a basis for sentence structure. Other filmstrips in this

series are prepared for grades 2-6, although all of the latter are not yet ready for distribution. None of the strips carry a grade designation, hence their use can be extended to any level of learning without loss of individual prestige. M. S. S.

Teaching with a Filmstrip. 50 frames. No. A1-5. Black and white, \$3.25. A very comprehensive explanation of the kinds of filmstrips, the basic steps in preparing for their use, and classroom procedures from presentation to follow-up. Practical suggestions, excellent illustrations. Invaluable aid to all preparing for or in educational work on any level. M. S. S.

Using and Understanding Numbers: Using and Understanding Numbers, 1-5; Using and Understanding Numbers, 5-9; Using and Understanding Numbers, 9-12; Learning to Tell Time; Learning About and Using Pennies, Nickels, and Dimes. Five filmstrips. \$5.50 each; \$23.75 for the series. Written by Joseph J. and Francesca L. Urbancek. Illustrated by Marguerite Taussig, Carol Coffee, and Betty Carroll. Primary teachers will find these filmstrips exceedingly useful for developing number concepts; primary children will have fun learning because the content is within their experience, and the gaily colored pictures are especially attractive. At the beginning of each filmstrip are several frames addressed to the teacher, telling what concepts are to be developed and suggesting ways for using the material. Specific directions or lesson plans have been avoided so that the teacher can follow her own judgment in using these filmstrips according to the needs and abilities of the individuals in her particular group. An excellent teaching aid for making numbers meaningful to children. M. G. H.

The following are available from the Jam Handy Organization, 2821 East Grand Boulevard, Detroit 11, Michigan:

Age of Discovery and Exploration. Series of 7 filmstrips, 15 frames each. Color. This series of mapstrips portrays vividly the routes of the several Portuguese, Dutch, Spanish, English, and French explorers. One strip surveys the journeys of the Norsemen of the ninth and tenth centuries. Another shows the medieval trade routes and the Crusades. Several contemporary maps show the concept of the world in the sixteenth century. These strips are profitable for any student who can read maps. High school and college teachers may find the conventional wall maps just as useful and less time consuming. Most helpful in the upper grade social science classes. C. R. M.

Growing Things: Plants Grow; Trees Grow; Butterflies Grow; Toads Grow; Birds Grow; Rabbits Grow; We Grow. This series of filmstrips is a laudable attempt to impress upon very young children the idea that all living things start from small beginnings and grow up, and that to grow they must eat. Brightly painted colors and scenes, including children with the plants and animals, are used to attract interest and hold attention. No important error of fact was noted. In the strip on the rabbit, newborn rabbits are shown obtaining nourishment in the manner designed by nature for all mammals. But when we come to the strip on human growth, *We Grow*, a baby is pictured feeding from a bottle held by its mother. Why the young rabbits should be shown enjoying their own mother's milk and the human baby be denied that privilege is not apparent. Children viewing this film, particularly those having no younger brothers or sisters, might well become conditioned to the false idea that a bottle is the only natural source of food for a human infant. The wisdom of such teaching may be questioned.

E. C. C.

MISCELLANY

Audio-Visual Guide, June, 1953, issue. 40 cents. Available through Audio-Visual Guide, 1630 Springfield Avenue, Maplewood, New Jersey.

This cumulative A-V guide contains valuable information pertaining to projectors, tape recorders, cameras, motion picture equipment, records, films and filmstrips at various levels concerning numerous different subject areas, and a list of free A-V catalogs and how to obtain them. New devices in A-V aids are described.

G. P.

Child Growth and Development Chart. By the Curriculum Committee for Health, Physical Education and Safety in the Elementary Schools of Washington, D. C. Arthur C. Croft Publications, New London, Connecticut. 1953. 50 cents.

This 21"x26" tabular summary shows the physical growth, characteristics, and psychological needs of children in five age groups ranging from under five to sixteen. Utilization of the chart is designed not only for the classroom teacher but for community organization dealing with children. Of special value is the section which relates the principles of child growth and development to the curriculum. This is an effort to explain to parents, what is often misunderstood, the reason for the current educational practices. In the interpretation of the chart stress is placed on gradual development rather than discrete changes in characteristics at a certain age.

J. M. B.

Booklet: A list of twenty-five 16 mm sound films. Available free on loan through Ford Motor Company, 16400 Michigan Avenue, Dearborn, Michigan.

Describes a library of twenty-five films, seventeen in color, eight in black and white, which are available either for loan or purchase. It includes nine films on the automobile industry; five on the lives of Americans, such as the American cowboy, Pueblo boy, etcetera; six vacation films on American scenic wonders; and five on educational subjects like "Driver Education." The films could be used in social science, physical science, economic, and history classes. For those interested these films would serve a variety of purposes from geography through psychology. They are typical of many excellent ones turned out by industry for the use of the public. It is suggested that one inspect and preview the list for possibilities in effective utilization.

W. J. P.

1954 Annotated List of Phonograph Records. Edited by Warren S. Freeman. Children's Reading Service, 1078 St. John's Place, Brooklyn 13, New York. 1953. Pp. 41. 10 cents.

The 1954 catalog lists about 1,000 selected recordings arranged by subject areas and grade groups from kindergarten through the college level. The Children's Reading Service has set up a central ordering service whereby records from any manufacturer can be supplied at school discount, thus enabling schools and libraries to combine all their record purchases into one order.

L. M. J.

Educational Motion Pictures, 1952 Catalog. Audio-Visual Center, Division of Adult Educational and Public Services, Indiana University, Bloomington, Indiana. Pp. 430.

An annotated list of 3,354 titles of 16 mm motion pictures. Films are classified according to title, subject matter, and grade level. To facilitate ordering films, a directory of major film producers with their addresses is included.

H. H. F.

A Directory of 2002 16 mm Film Libraries. Office of Education, Washington, D. C., 1951. Bulletin 1951, No. 11. 30 cents.

The Office of Education has compiled a list of companies, institutions, and organizations which lend or rent 16 mm educational films within the United States and have given their consent to be listed. These libraries, with some indication concerning the nature and amount of films available, are listed by city and state. Here is an indispensable tool for the teacher in securing instructional films.

H. H. F.

NEWS

EDITED BY GEORGE J. STEINER

CHICAGO TEACHERS COLLEGE

CHICAGO TEACHERS COLLEGE SUMMER SESSION
— The 1954 tuition-free summer session of eight weeks will be conducted at the main campus only from June 28 to August 20. Full information may be obtained by writing to the Registrar, Chicago Teachers College, 6800 South Stewart Avenue, Chicago 21. The 1954 offerings are designed to aid the following groups:

1. Teachers who wish to take courses in order to qualify in another teaching field or who wish to take refresher courses.
2. Teachers who wish to meet state and/or county certification requirements or who hold temporary certificates to teach and wish to continue their preparation for an examination.

3. Teachers interested in school libraries.
4. Graduates of the college who wish to complete their third and fourth years of work toward the bachelor of education degree.
5. Teachers in the Chicago Public School System who wish to convert kindergarten to kindergarten-primary certificates or to obtain kindergarten-primary or intermediate-upper grade certificates.
6. Regular session students who have credit deficiencies, who wish to carry a lighter load during the regular session, or who wish to complete graduation requirements in less than four years.
7. Individuals interested in a graduate program.

The preliminary announcement of courses follows:

1954 SUMMER SESSION

Course Number and Title	Cr. Hrs.	¹ No. Per.	8:15 MTWTh	9:20 ThF	10:25 307A	11:30	12:35	1:40	Instructor
*Art 109-s—Decorative Design and Color..... (May be substituted for Art 105)	1	4							Yochim
Art 116-s—Drawing and Composition..... (May be substituted for Art 106 and 107)	2	7							Yochim
Art 201-s—Art in KgP Education.....	2	7							Yochim
Art 202-s—Teaching Art in the Intermediate and Upper Grades..... (May be substituted for Art 108)	2	7							Yochim
Art 203-s—Methods of Teaching Art..... (May be substituted for Art 108)	1	4							Yochim
Bus. 153-s—Principles of Accounting.....	3	5							Miller
Educ. 221-s—Philosophy and Organization of American Public Education.....	4	7							Beck
Educ. 262-s—Evaluation of Instruction.....	3	5							Tyler
Educ. 263-s—History of American Education..... (May be substituted for Education 104)	3	5							Pfau
Educ. 264-s—Philosophy of Education.....	3	5							Beck
Educ. 264-t—Philosophy of Education.....	3	5							Tyler
Educ. 323-s—Educational Research and Evaluation..	3	5							Tyler
Educ. 357-s—Audio-Visual Education	3	7							Lewis
Educ. 357-t—Audio-Visual Education	3	7							Lewis
Educ. 362-s—Elementary School Classroom Management	3	5							Connelly
Educ. 376-s—Human Relations in the Elementary School	3	5							Berghoefer
Educ. 108KgP-s—Childhood Education	3	5							Olson
(May be substituted for Education 106KgP)									
Educ. 227KgP-s—Teaching Reading in the Primary Grades	3	5							Lynch
(May be substituted for English 205)									
Educ. 228KgP-s—Play and Rhythmic Expression... (May be substituted for Education 212KgP)	2	7							Lynch
Educ. 229KgP-s—Arts and Crafts in the KgP Grades	2	7							Lynch
(May be substituted for Education 105KgP)									
Educ. 319KgP-s—Principles and Methods of KgP Education II.....	3	5							Olson
Eng. 116-s—American Literature	3	5							Steiner

Course Number and Title	Cr. ¹ No.		8:15	9:20	10:25	11:30	12:35	1:40	Instructor
	Hrs.	Per.							
Eng. 117—See English 208.....									Steiner
Eng. 120-s—Composition II	3	5	309C						Card
Eng. 123-s—Introduction to Literature..... (May be substituted for English 118)	3	5				309C			
Eng. 124-s—Readings in Literature.....	3	5	307C						Card
Eng. 154-s—Writing for Publication.....	3	5			305C				Suloway
Eng. 202-s—Children's Literature	3	5	305C						Kincheloe
Eng. 202-t—Children's Literature	3	5					305C		Kincheloe
Eng. 205—See Education 227KgP.....									
Eng. 206-s—Teaching of the Language Arts in the Elementary School.....	3	5		305C					Kincheloe
Eng. 206-t—Teaching of the Language Arts in the Elementary School.....	3	5					307C		Suloway
Eng. 208-s—Literature for Children in the Primary Grades	3	5				203C			Olson
(May be substituted for English 117)									
Eng. 268—American English	3	5		309C					Card
Eng. 271-s—Public Discussion	3	5					309C		Steiner
Eng. 272-s—Problems in School Journalism I	1	2				MTh 301C			Suloway
Eng. 273-s—Problems in School Journalism II	1	2				MTh 301C			Suloway
Eng. 274-s—Problems in School Journalism III	1	2				MTh 301C			Suloway
Eng. 275-s—Victorian Literature	3	5				307C			Suloway
Eng. 303-s—Reading Methods and Materials for Ungraded Divisions	2	4						TWThF 113C	"X"
Speech 101-s—Fundamentals of Speech.....	2	5						213C	Walker
Speech 151-s—Oral Interpretation of Literature.....	3	5			213C				Walker
Speech 258-s—Speech for the Classroom Teacher.....	3	5				213C			Walker
Speech 301-s—Phonetics	3	5	213C						Walker
³ Ind. Arts 106-s—Elementary Industrial Arts..... (May be substituted for Ind. Arts 103)	2	7				208C			Harrison
⁴ Ind. Arts 264-s—Crafts	3	8			212C				Hewitt
⁴ Ind. Arts 270-s—Plastics	3	8		208C					Hewitt
⁴ Ind. Arts 272-s—Ceramics	3	8	208C						Hewitt
⁴ Ind. Arts 273-s—Metal	3	8	212C						Harrison
(May be substituted for Ind. Arts 267)									
⁴ Ind. Arts 274-s—Wood	3	8			208C				Harrison
(May be substituted for Ind. Arts 268)									
⁴ Ind. Arts 275-s—Electricity	3	8		212C					Harrison
(May be substituted for Ind. Arts 155)									
⁴ Ind. Arts 356-s—Ceramics II, Pottery Shapes and Glazes	3	8	208C						Hewitt
⁵ Home Mech. 251-s—Preparation for Teaching Home Mechanics	3	7					208C		Hewitt
Lib. Sci. 251-s—Processing of Library Materials...	3	5	300C	300C					Butler
Lib. Sci. 254-s—Reading Guidance for the Upper Grades	3	5				307C			Butler
Lib. Sci. 351-s—Audio-Visual Education	3	7				MWTh 300C	MWTh 300C		Lewis
Lib. Sci. 351-t—Audio-Visual Education	3	7				TWF 300C	TWF 300C		Lewis
Lib. Sci. 352-s—Reading Guidance for the Upper Grades	3	5			307C				Butler
(Same as Lib. Sci. 254, plus extra work for graduate credit)									
Lib. Sci. 454-s—Reference Sources and Methods...	3	5	MWTh 300C	MTh 300C					Veit
Math. 103-s—College Mathematics	5	9		207C	207C				Rasmusen
Math. 151-s—College Algebra	3	5				209C			Urbancek
Math. 152-s—Trigonometry	3	5		209C					Urbancek
Math. 204-s—Methods of Teaching Arithmetic, Grades 3-8	3	5	209C						Urbancek
(May be substituted for Math. 203)									
Math. 256-s—Solid Analytic Geometry.....	3	5	207C						Sachs
Math. 259-s—Differential Equations.....	3	5					207C		Rasmusen
Math. 264-s—Calculus III	3	5			209C				Sachs
Math. 266-s—College Geometry	3	5				207C			Sachs

Course Number and Title	Cr. ¹ No. Hrs. Per.		8:15	9:20	10:25	11:30	12:35	1:40	Instructor
Music 108-s—Fundamentals (May be substituted for Music 105)	2	4					TWThF 306C		"X"
Music 109-s—Repertoire and Conducting (May be substituted for Music 104)	2	4		MTWTh 306C					"X"
Music 161—Choir	1	5		302C					Simutis
Music 202-s—Teaching Music in Grades 3, 4, and 5 (May be substituted for Music 205)	2	5			306C				"X"
Music 206-s—Understanding and Appreciation (May be substituted for Music 107 or 201)	2	4					MTWTh 306C		"X"
Music 208-s—Teaching Music in Kindergarten, Grades 1 and 2 (May be substituted for Music 204)	2	4	TWThF 301C						"X"
Music 270-s—Teaching of Vocal Music in Grades 6, 7, and 8	3	5				301C			"X"
P. E. 204-s—Health Education	1	2	MW 201C						"X"
Bi. Sci. 108-s—Biological Science II (May be substituted for Sci. 105)	3	7			MW 109C	109C			Colin
Bi. Sci. 201-s—Microbiology and Human Physiology (May be substituted for Sci. 204)	4	10	110C	110C					"X"
Bi. Sci. 201-t—Microbiology and Human Physiology (May be substituted for Sci. 204)	4	10				110C	110C		"X"
Bi. Sci. 252-s—Genetics	3	7	109C	TTh 109C					Colin
Bi. Sci. 302-s—Anatomy and Physiology of Hear- ing and Speech Organs	3	7		TF 113C	113C				"Z"
Bi. Sci. 360-s—Genetics	3	7	109C	TTh 109C					Colin

COURSES AT NATURE CAMP IN COOK COUNTY FOREST PRESERVE

Course Number and Title	Cr. Hrs.	Instructor
⁶ Bi. Sci. 351-s—Forestry	2	8:00 A. M. Monday, June 28, to 12:00 Saturday, July 10 Sanders
⁶ Bi. Sci. 353-s—Animals with Backbones (Vertebrates)	2	8:00 A. M. Monday, July 12, to 12:00 Saturday, July 24 Sanders
⁶ Bi. Sci. 355-s—Animals without Backbones (Invertebrates)	2	8:00 A. M. Monday, July 26, to 12:00 Saturday, August 7 Sanders
⁶ Bi. Sci. 357-s—Conservation Education	2	8:00 A. M. Monday, August 9, to 12:00 Saturday, August 21 Sanders

Course Number and Title	Cr. ¹ No. Hrs. Per.		8:15	9:20	10:25	11:30	12:35	1:40	Instructor
Phy. Sci. 101-s—Physical Science I (Except for P. E. Minors, may be substituted for Sci. 103)	3	7	112C	MW 112C					"Y"
Phy. Sci. 101-t—Physical Science I (Except for P. E. Minors, may be substituted for Sci. 103)	3	7					TTh 112C	112C	Vesecky
Phy. Sci. 102-s—Physical Science II	3	7			WF 112C	112C			Vesecky
Sci. 207-s—Teaching Elementary Science, Grades 3-8 (May be substituted for Sci. 208)	3	9					MTWTh 109C	109C	"Y"
Psy. 110-s—General Psychology (May be substituted for Psy. 107)	3	5					8C		Kirk
Psy. 112-s—Child Development (For students on new curriculum only)	3	5			7C				Kirk
Psy. 113-s—Educational Psychology (For students on new curriculum only)	3	5					8C		Hite
Psy. 203-s—Educational Psychology (For students other than those on new curriculum)	3	5	7C						Kirk
Psy. 203-t—Educational Psychology (For students other than those on new curriculum)	3	5		8C					Hite

Course Number and Title	Cr.	¹ No.	Hrs.	Per.	8:15	9:20	10:25	11:30	12:35	1:40	Instructor
Psy. 204-s—Child Development (For students other than those on new curriculum)	3	5			8C						Temkin
Psy. 204-t—Child Development (For students other than those on new curriculum)	3	5					8C				Temkin
Psy. 256-s—Mental Measurement	3	5							7C		Hite
Psy. 260-s—Mental Hygiene	3	5				7C					Brye
Psy. 261-s—Psychology of Exceptional Children...	3	5						214C			Brye
Psy. 305-s—Psychology of Exceptional Children...	2	4							TWThF	209C	Brye
Psy. 306-s—Mental Hygiene	2	4				7C					Brye
Psy. 307-s—Psychology of Behavior Difficulties...	2	4			113C						"X"
Psy. 308-s—Psychology of Adolescence.....	3	5						8C			Temkin
Ec. 151-s—Principles of Economics.....	3	5			204C						Berezin
Geog. 103-s—Physical and Cultural Geography..... (May be substituted for Geog. 101)	4	7				202C	202C				Brockman
Geog. 256-s—Conservation of Natural Resources...	3	5							202C		Brockman
Hist. 102-s—World History	3	5				214C					Chada
Hist. 201-s—American History	3	5			214C						Pfau
Hist. 201-t—American History	3	5							204C		Chada
Hist. 252-s—History of Europe, 1815-1914.....	3	5						207C			Chada
Hist. 267-s—Growth of American Civilization III: The U. S. as a World power, 1898.....	3	5				307C					Pfau
Pol. Sci. 251-s—American National Government...	3	5				204C					Fernitz
Pol. Sci. 257-s—Contemporary International Relations	3	5					204C				Berezin
Soc. 201-s—Social Dynamics	3	5								204C	Berezin
Soc. Sci. 201-s—Teaching the Social Studies..... (May be substituted for Soc. Sci. 203)	2	4				TWThF	202C				Fernitz
Soc. Sci. 201-t—Teaching the Social Studies.....	2	4						MTWTh	202C		Fernitz
Soc. Sci. 201-w—Teaching the Social Studies.....	2	4							MTThF	202C	Fernitz
Spanish 151-s—Elementary Spanish I	4	7						302C	302C		Connelly

STUDENT TEACHING SESSION, JUNE 28 TO AUGUST 20, 1954

The following courses are not open to regular session students. They are planned for graduates of accredited colleges and universities who are preparing themselves to take a Chicago certificate examination. Written approval from Miss Tierney, Chairman of the Department of Student Teaching, is necessary to register for Student Teaching and Seminar. Registration for the summer program of student teaching must be completed by June 1, 1954, in order to place students in practice schools. An oral interview will be arranged for candidates whose transcripts have been approved. A physical examination by the College physician is a requirement for all entering the program.

Course and Title	Cr.	No. of Days	Hrs.	Per Week	Time	Room	Instructor
Educ. 295-s—Student Teaching and Seminar	6	5		Daily MW	8:15-11:30 1:15- 3:45	Elementary School 214C	Tierney
Educ. 362-t—Classroom Management in Elementary Schools	3	2		TTh	1:15- 3:45	214C	Haas
Educ. 365-s—Psychology of Elementary School Subjects	3	2		TTh	1:15- 3:45	213C	"X"

¹Number of 60-minute periods per week.

²May be substituted for Art 105. Students who need credit for Art 106 or 107 may register for the courses at these hours. If a student needs credit for two or three of the courses Art 106, 107, 109, or 105, hours may be arranged provided written approval is obtained from Mr. Emerson.

³Two of the seven periods to be scheduled by Instructor.

⁴Three of the eight periods to be scheduled by Instructor. Arrangements can be made with the Instructor to carry two of these courses.

⁵Two periods to be arranged.

⁶Prerequisite: 1 year of Biological Science or consent of instructor.

PERIODICALS

EDITED BY PHILIP LEWIS

CHICAGO TEACHERS COLLEGE

"Speak Out Silent People." By Howard Whitman. *Collier's*, February, 1954.

This first of a series of articles announced to be a searching look at America's schools appears to be a quick glance that has very little real searching to back up its generalizations. Many current problems, including teacher shortages, lack of facilities, deterioration of buildings, are held to be only a part of the crisis in our schools. From the implications present, the reader is lead to believe that left-wing and right-wing extremist groups are in control and that practically everything has deteriorated education-wise. It is interesting to note that the happenings cited in many instances represent isolated and unfortunate incidents selected from among a much greater assortment of very creditable activities in our schools. Current trends and improvements in practice are shown to be otherwise through the half-truths of insufficient explanation. The real needs of the schools in terms of provisions to attract competent teachers and to retain those now in the profession, to provide adequate housing and instructional facilities, and to inform the communities of the heroic job being done by overloaded educational systems are carefully glossed over. Teachers everywhere should not only read, but analyze this and the articles to follow. Rebuttal is necessary and simple through translation of the underlying issues and conditions to the public.

"Behind Today's Delinquencies." By Samuel Engle Burr, Jr. *Phi Delta Kappan*, March, 1954.

The author debunks the theory that the rise of juvenile delinquency is easily explained on the basis of the uncertainty and tensions of present-day living. Instead, it is held that the causes are many and complex, involving both the school and the home. The appearance of progressive education during the period between the two World Wars is termed one of the major factors involved. This is not meant to condemn progressive education as such, but rather to emphasize how misinterpretations and wrong inferences concerning the educational principles involved led to malpractice. Secondly, parental attitudes demand little restraint on the part of their progeny. This fact, coupled with the curse of "the ready made" which eliminates the need for many constructive activities formerly performed in the home and the hesitation to ask children to work, gave free rein for undesirable outlets. The establishment of

regulations alone will not lead to the proper education of the individual.

"The Problem of Home Study." By Robert Paul Brimm. *The Nation's Schools*, April, 1954.

Another attempt to analyze the knotty problem of homework was undertaken by the faculty of the Teachers College High School at Iowa State Teachers College. Parents, administrators, teachers in other schools, and pupils and parents in the local school were consulted. The major conclusion reached was that very little agreement existed on this subject. It was evident, however, that while the outside assignment is still very firmly entrenched, some changes have been effected in practice. The important question dealt with determined what kind of outside work was really effective and appropriate. Several questionnaires were utilized; a complete report of the findings, High School Bulletin No. 3, will be sent upon request. Generally, the faculty decided that outside assignments are to be made at the discretion of the teacher, that the difficulty of the work should increase with the grade level, and that the factors of busywork and punishment should be eliminated.

"Supervisors Are Human, Too!" By Ima Supervisor. *Virginia Journal of Education*, October, 1953.

This satirical but very human report of what the supervisor faces in making his rounds will strike responsive chords among readers on both sides of the educational fence. It brings on strange feelings involving both guilt and humor and shows just how frustrating the job of the supervisor can be. There's a moral too—if you look for it.

"A Matter of Degrees." By A. H. Child. *The British Columbia Teacher*, September-October, 1953.

An article previously appearing in the periodical identified above under the title, "Another Rail-Sitter," and reviewed in the Journal, dealt with the idea that teachers holding university degrees comprise a privileged class and that other methods should be found for grading, paying, and certifying professional educational workers. In rebuttal, Mr. Child defends the position of the degree holder but levels some criticism at the educational institutions granting degrees and suggests revisions in requirements and offerings.

BOOKS

EDITED BY ELLEN M. OLSON

CHICAGO TEACHERS COLLEGE

IMPORTANT NEW BOOKS

Contributors to this section are Fred O. Anderson, Helen Atwater, John M. Beck, George W. Boyle, George E. Butler, Joseph Chada, Mary C. Cole, Edward C. Colin, Eve K. Clarke, Marion Fischer, Russell A. Griffin, Mabel G. Hemington, Emily M. Hilsabeck, Lorain O. Hite, Louise M. Jacobs, R. Bruce Kirk, David Kopel, Vaso Krekas, Marcella G. Krueger, Jacquelyn M. Krump, Philip Lewis, Melvin M. Lubershane, Ursula Maethner, Teresa O'Sullivan, Eloise Rue, Evelyn Slater, Irwin J. Suloway, Joseph J. Urbancek, Mary Jean Walsh, Dorothy E. Willy, Maurice Yochim, and Gus Ziagos.

FOR TEACHERS AND SUPERVISORS

The Teaching-Learning Process. By Nathaniel Cantor. 31 West 54th Street, New York 19, New York: The Dryden Press, Inc., 1953. Pp. 350. \$2.90.

Those who have read the author's earlier publication, *The Dynamics of Learning*, will welcome this latest volume. In the first study, the author examined the teaching-learning process mainly from the student's point of view. The present volume examines the same process primarily from the point of view of the teacher. The role of group dynamics in learning is stressed. Transcripts of group discussion are used to trace the attempts to develop sensitivity to interaction in the teaching-learning. The dominant theme of this book is that significant learning is predicated upon the desire of the learner to learn. The illuminating insights into how to achieve this are valuable both to pre-service and in-service education.

J. M. B.

Child Psychology: A Dynamic Approach. By Leigh Peck. 285 Columbus Avenue, Boston 16, Massachusetts: D. C. Heath and Company, 1953. Pp. 536. \$5.25.

An excellent use of illustrative anecdotes, supplied from case histories, supports the sound psychological information in this book. The format is much superior to the older "footnote" type of writing. The author traces the individual child from his inheritance through later adolescence. All types of possible development are described, with a reference to the effects of home, school, and neighborhood on this development. The keynote is co-operation in providing an encouraging atmosphere for the growth of the child toward constructive citizenship.

R. B. K.

The Modern Community School. Edited by Edward G. Olsen. 35 West 32nd Street, New York 1, New York: Appleton-Century-Crofts, Inc., 1953. Pp. 243. \$2.50.

This is a second report, after its pioneer publication in this field fifteen years ago, by the society now called the Association for Supervision and Curriculum Development. The new Committee on the Community School which prepared this report was charged with describing current, best practice and tested procedures. The authors emphasize "direction, process and procedure even as (they) present many case studies, both real and fictional."

D. K.

United Nations, N. Y. By Dorothy Sterling. Photographs by Myron Ehrenberg. 575 Madison Avenue, New York 22, New York: Doubleday and Company, Inc., 1953. Pp. 80. \$2.50.

Those who can not afford the trip to see the physical facilities of the United Nations or watch its vast official-

dom at work will satisfy their curiosity by reading the text and studying the excellent illustrations of this concise book. *The United Nations, N. Y.* partakes the character of a "you are there" presentation. Its attempt to describe the operation and mechanics of the U. N. building is successful, and the story of the men conducting the business, principally of the Secretariat, most instructive.

J. C.

The Crowded Air. By Roger Manvell. 1440 Broadway, New York 18, New York: Channel Press, 1953. Pp. 99. \$2.75.

Television has now been part of the American scene long enough to point up many of its strengths as well as weaknesses. In the United States broadcasters are sharply criticized for courting the mass audience and aiming at high popularity ratings without due concern for the appropriateness of the offerings or for the ultimate public welfare. Non-commercial channel reservations have been set aside to see what non-profit, educational organizations can do to lift the level of video programming. In England an entirely different pattern has developed. BBC with its government-granted monopoly of television is charged with discouraging creativeness, eliminating competition, and tending too much toward high-brow programming. For this reason the British are considering licensing commercial stations as a supplementary outlet to counterbalance the situation. The author, an Englishman familiar with TV here and abroad, is particularly qualified to draw parallels, define problems, and point up the potentialities of video at a time when this vital medium stands at its most important crossroads. This job is done in a concise, orderly, and effective manner designed to adequately inform the interested layman or educator in the field.

P. L.

Philosophical Studies. By Heinrich Gomperz. Edited by Daniel S. Robinson. 1140 Columbus Avenue, Boston 20, Massachusetts: The Christopher Publishing House, 1953. Pp. 287. \$7.50.

These studies represent a collection of Dr. Gomperz' lectures in American universities and his articles published in leading philosophic journals. Written in the empirical tradition, these scholarly essays avoid the ambiguous style which often discourages lay interest in philosophic speculation. The major portion of the book is devoted to Greek philosophy, in particular Plato, and to studies in ethics. Although Dr. Gomperz' essays will appeal generally to philosophy students, teachers will find the chapters on ethics a pleasurable, intellectual activity.

J. M. B.

Television and Education in the United States. By Charles A. Seipmann. Paris, France: United Nations Educational, Scientific, and Cultural Organization, 1952. Pp. 131. \$1.00.

This UNESCO publication, one of a series dealing with the press, film, and radio, is designed to make available to the peoples of the world an intimate report on the activities and progress of video in this country. The documentation capitalizes on the experience and experimentation of the leader in this field of communication and is presented for examination and evaluation by all who are now interested in utilizing television. Excellent treatment is given the areas concerned with explaining the U.S. system of television, network TV and their educational policies, television at the college and university level, along with moderately good coverage of television and the schools. Audience composition, TV impact and effects, and research findings are given superficial mention. Despite these latter shortcomings, due in major part to space limitations, a rather faithful description of U.S. television is given including many items not generally known even to residents of this country. Reading this report is time well spent. P. L.

They Learn What They Live: Prejudice in Young Children. By Helen G. Trager and Marian Radke Yarrow. 49 East 33rd Street, New York 16, New York: Harper and Brothers, 1952. Pp. 392. \$4.50.

In this fascinating and detailed account of "action research" the authors present a careful study of children's racial and religious prejudices and a description of two school-club programs undertaken in several Philadelphia schools designed in program "X" to lessen or eradicate these prejudices and in program "Y" to reinforce them. That both types of changes in children's attitudes can be achieved by the same teacher, provided she is aware of the values she is attempting to teach, is convincingly demonstrated. This book provides a simple, dignified, yet eloquent portrayal of the need for intercultural education in the public school. The book goes further and shows how readily this type of education can be incorporated in the curriculum of the average school by almost any teacher. D. K.

Education for All American Youth: A Further Look. By the Educational Policies Commission of the N.E.A. of the United States. 1201 Sixteenth Street, N.W., Washington, D. C.: National Education Association, 1952. Pp. 402. \$2.00.

The original volume, published in 1944, gave widespread publicity to the excellent modern practices in selected secondary schools and stimulated their extensive acceptance throughout the country. Changes in this revision are "limited to the removal of anachronisms... and to the addition of brief discussions of currently important problems in secondary education." However, a noteworthy addition to the volume consists of a chapter describing significant developments, in the intervening years, in the areas of guidance, vocational education, community-school relations, and curriculum. D. K.

The Human Figure. By David K. Rubins. 432 Fourth Avenue, New York 16, New York: The Studio Publications, Inc., 1953. Pp. 94. \$3.50.

An excellent anatomy book, recommended for artists, art teachers, and art students. It is well illustrated. Bones, muscles, and tendons are drawn to give a three-dimensional effect, thus suggesting their massive forms as well as their diagrammatic arrangements. A well written text clearly defines meanings and functions. Numerous sketches throughout the book help to illustrate how anatomical structure aids understanding and drawing of the human figure. The author has effectively simplified the

study of anatomy by eliminating nonessentials and including only that which influences the contour or surface form of the figure. It is a fine manual for sculptors as well as painters. M. Y.

Man, Time, and Fossils: The Story of Evolution. By Ruth Moore. Illustrated by Sue Richert. 501 Madison Avenue, New York 22, New York: Alfred A. Knopf, 1953. Pp. 411. \$5.75.

This is a popular book on evolution by a reporter on the *Chicago Sun-Times*. The approach is biographical: sketches are given of the lives and works of selected famous and near-famous scientists from Lamarck and Darwin down to those now living who have contributed to evolution. The style is breezy and conversational. There are many excellent photographs and drawings. Miss Moore has not only read widely but has personally interviewed some of the scientists. The book as a whole is recommended. Part III, "A Changed Theory of Man's Evolution," is in some respects misleading and not wholly consistent with Part II on "Man's Buried Record." The difficulty lies in the use of the terms ape-man, man, true man, and modern man. No time estimate can have a clear meaning without a precise definition of these terms. Here the reader is told that "The new timing indicates that humans who had the requisite intelligence to be called men did not reach that high status until about 50,000 years ago. Modern man then is only about 50,000 years old." The author also states that investigators have "demonstrated that man could have made the steep climb from ape-man to modern man in the shorter time [50,000 years] now allotted." These statements are highly improbable. E. C. C.

Teaching Art to Children. The How to Do It Series, Number 28. By Minnie McLeish and Ella Moody. 432 Fourth Avenue, New York 16, New York: Studio-Crowell Publishers, 1953. Pp. 96. \$4.50.

This is a vital book which explores methods of assembling art materials and setting up teaching procedures for experimentation. Suggested products which are an outgrowth of such experiences are shown in many photographs of children's art work from several countries. The section on weaving is especially fine. An approach encouraging the use of various textures and materials, beginning with suggestions for making and using many types of small looms, is presented. M. C. C.

Child Art Grows Up. By Kenneth Holmes and Hugh Collinson. 432 Fourth Avenue, New York 16, New York: The Studio Publications, Inc., 1952. Pp. 95. \$4.50.

This well-illustrated volume advocates directing the aesthetic growth of children through school art experiences closely related to "out of school" art needs; i.e. that functional aspects and aesthetic sensibilities be given equal consideration in the teaching of art to children. It also advises that the creative and the imaginative development of children have precedence over the development of technical skills. The philosophy underlying the text of this book seems essentially sound; the methods recommended for its implementation through the suggested art program appears rather questionable. M. Y.

Let's Talk Sense About Our Schools. By Paul Woodring. 330 West 42nd Street, New York 36, New York: McGraw-Hill Book Company, Inc., 1953. Pp. 213. \$3.50.

Living up to his title, the author speaks plainly and rationally about the current attacks on education, arming the reader with facts, insights, and perspectives. Chapters of special interest deal with progressive education, teachers colleges, and academic freedom. Recommended for teachers as well as for parents and laymen generally. D. K.

Just Imagine! By William S. Gray et al. 433 East Erie Street, Chicago 11, Illinois: Scott, Foresman and Company, 1953. Pp. 255. \$1.80.

A transition basic reader for use in the intermediate grades. The stories are selected for their appeal to pre-adolescent pupils; the vocabulary skills involved proceed from the simplest levels of word attack through those usually mastered in third grade. It is suggested for use with average fourth grade pupils to "clinch" earlier learning. Its major contribution, however, should be its value for slower readers in grades four through six who have completed earlier readers without mastering them. The teacher's guidebook is complete and well-planned; format and illustrations are admirable. I. J. S.

Handcrafts for Elementary Schools. By Frank C. Moore et al. Illustrated by Anna-Laura Kingzett. 285 Columbus Avenue, Boston 16, Massachusetts: D. C. Heath and Company, 1953. Pp. 324. \$5.00.

Written to answer many questions which teachers might ask about craft work, this book stresses correlation of crafts and academic subjects to form a well-rounded, integrated elementary handcraft program. It is liberally furnished with appealing illustrations which give step-by-step instructions toward the completion of each project. F. O. A.

Supervision as Human Relations. By John A. Bartky. 285 Columbus Avenue, Boston 16, Massachusetts: D. C. Heath and Company, 1953. Pp. 106. \$4.00.

This book commands attention because it was prepared by a well-known educational administrator and presents a modern systematic treatment of the supervisory role in schools. Perhaps its strongest feature is the abundant illustrations of problems encountered by the supervisor; the graphic descriptions of those situations often include verbatim accounts of what was said by the persons involved, and are followed by helpful analytic commentaries. Noteworthy, too, is the author's laudable, if not always successful, attempt to apply psychological insights concerning human needs and drives to the study and conduct of working relationships between teachers and their superior officers. Unfortunately, the author's admittedly limited psychological background proved inadequate for the task he set himself, as revealed by his oversimplified "typing" of behavior, by a rather mechanical use of dynamic formulations, and by occasional misinterpretations of theory. Moreover, the author professes a democratic orientation, but subscribes at times to cynical practices, such as, "Praise-censure-praise is a common formula for the supervisor to follow," which are hardly consonant with a democratic philosophy. These are serious faults, regrettable especially in a book containing a great deal of useful information and sound counsel. D. K.

FOR HIGH SCHOOL AND COLLEGE STUDENTS

Sunny, the New Camp Counselor. By Lucile G. Rosenheim. 8 West 40th Street, New York 18, New York: Julian Messner, Inc., 1952. Pp. 179. \$2.50.

In spite of good material the author has nevertheless followed the trite pattern of the worthless vocational story, wherein the green young graduate is able to solve her career problems and attain romance, not in the usual year but in less than one month. Why fool our teenage girls with such improbabilities? E. R.

Jean Baptiste Pointe De Sable, Founder of Chicago. By Shirley Graham. 8 West 40th Street, New York 18, New York: Julian Messner, Inc., 1953. Pp. 180. \$2.75.

Fictionalized life history of the son of a West Indian pirate, educated in France, adopted by the Pottawatomie, and married to one of their tribe. It covers the period

Effective Home-School Relations. By James L. Hymes. Illustrated by Hal Doremus. 70 Fifth Avenue, New York 11, New York: Prentice-Hall, Inc., 1953. Pp. 264. \$3.50.

In primitive tribes the home and school were one. Today the school is the primary supplement to the home. The author feels that an effective home-school relations program can restore some measure of the original identity. Hymes establishes certain principles in terms of parents and their children, parents and schools, and teachers' attitudes. He then proceeds to outline techniques which may be used to improve relations between home and school. It is in this largest portion of his book that the author provides the teacher, the PTA officer, and the principal with some really valuable help. The comments relative to participation of the parents in the actual teaching within the classroom will not be read with indifference by any one interested in schools. References to collateral readings appear within each chapter. At the end of the book is an excellent bibliography of pamphlets, books, magazine articles, and films. These materials are offered to provide understandings of the problems shared in common by the home and the school, rather than to describe additional techniques. R. A. G.

The Enjoyment of Poetry with Anthology for Enjoyment of Poetry. By Max Eastman. 597 Fifth Avenue, New York 17, New York: Charles Scribner's Sons. Pp. 646. \$3.25.

In the forty years since its original publication, *The Enjoyment of Poetry* has become a standard work on the nature and values of poetry. Its application of psychology to the poetic processes is no longer new, yet the volume is still a must for the thoughtful teacher of literature. The *Anthology*, also reprinted, is less distinguished, although Eastman's prejudices against the cult of unintelligibility do not prevent the inclusion of works by Joyce, Eliot, Pound, and Cummings. I. J. S.

Administering the Elementary School. By William C. Reavis et al. 70 Fifth Avenue, New York 11, New York: Prentice-Hall, Inc., 1953. Pp. 631. \$5.00.

The objective of this book is to help elementary school principals and teachers enter into administration as a co-operative educational enterprise. It conceives the basic function of the elementary school to be guiding every child to have experiences that will make him a responsible, considerate, contributing citizen, and emphasizes as means of implementing this program such areas as the curriculum, organization and improvement of faculty, and school-community relationships. The organization and language of the book are clear and straightforward. M. F.

of the French in the Mississippi, and gives us a full length portrait based on as many facts as the author could obtain of the Negro American who first settled on the site of Chicago. E. R.

The Calico Year. By Dorothy Gilman Butters. 225 South 15th Street, Philadelphia 2, Pennsylvania: Macrae-Smith Company, 1953. Pp. 221. \$2.50.

Tracy Cannon and her younger high-school age sister Tina, separated under the care of two wealthy aunts, are reunited for a happy year of making their own way when they become heirs to an old farmhouse in the Berkshires. Their mistakes and successes make good and exciting reading for all younger teenage girls; the good, common sense displayed makes the book also worthwhile. E. S.

Runaway from Riches. By Jack Bechdolt. 300 Fourth Avenue, New York 10, New York: E. P. Dutton and Company, Inc., 1952. Pp. 191. \$2.50.

Phoebe Bowen, too protected and too rich, finds life exciting when circumstances throw her into the family circle of the Rileys, poor but happy. A not too convincing series of misfortunes puts her at the mercy of her own resources, suddenly cut off from her father's watchful care. This story is a bit too romantic to appeal to the serious teenager; for very light reading it is probably good summer fare. E. S.

Hollywood Star. By Gladys Malvern. 8 West 40th Street, New York 18, New York: Julian Messner, Inc., 1953. Pp. 180. \$2.50.

Gloria Whitcomb, a ballet dancer, is chosen to portray Pavlova in a movie. With no dramatic experience, she is miserable and amateurish in front of the camera until an older star teaches her valuable techniques in acting. But even with sudden fame, she returns to her true love, Doug Gardner, and their work together in ballet. Although this story is about a glamorous subject, it conveys with authenticity the hard work, long hours, and fatigue that go into movie-making. Thoroughly enjoyable. E. K. C.

Here Is a Book. By Marshall McClintock. 424 Madison Avenue, New York 17, New York: Vanguard Press, Inc., 1953. Pp. 52. \$2.50. Includes *Scoop*, illustrated by Ninon MacKnight, pp. 52.

Reissue of a useful title on the technical processes in publishing: manuscript, editing, printing, binding, offset lithography, and selling. It would be still more useful to have an exhibit of the various processes to accompany the first fifty-two pages rather than the completed book which is bound with it. E. R.

They Made America Series. 330 West 42nd Street, New York 36, New York: McGraw-Hill Book Company, Inc., 1952 and 1953.

Charles Willson Peale: Artist and Patriot. By Berta N. Briggs. Illustrated. Pp. 256. \$2.80.

This is an excellent supplement to United States history for the study of the Revolutionary period, since Peale played an important role in the War for Independence. For junior high school.

General Billy Mitchell. By Roger Burlingame. Illustrated by photographs from the Library of Congress. Pp. 212. \$2.40.

Dynamic Billy Mitchell did all in his power to make America's armed forces air-conscious. This excellent biography is based on Mitchell's diary and papers.

Stephen F. Austin. By Carleton Beals. Illustrated by Jay Hyde Barnum. Pp. 263. \$2.80.

This interesting, historical account of the man who helped to make Texas great is based on facts gained from authentic letters. For high school juniors and seniors.

Red Jacket. By Arthur C. Parker. Illustrated by Jack Moment. Pp. 228. \$3.00.

The life story of the famous Seneca Indian orator, Red Jacket, who spoke for a wronged people and held to a dying dream, is a rare and revealing history of broken promises, broken dreams, and a broken people. For the most part it is a sad story, but there are elements of humor and much practical wisdom.

George Rogers Clark. By Walter Havighurst. Illustrated by Jack Moment. Pp. 246. \$3.00.

This is a stirring and authentic biography of George Rogers Clark, who opened the whole of the old Northwest to settlement. H. A.

The United States and India and Pakistan. By W. Norman Brown. Edited by Donald C. McKay. 44 Francis Avenue, Cambridge 38, Massachusetts: Harvard University Press, 1953. Pp. 308. \$4.50.

Like the several other volumes on American foreign policy, originally edited by Sumner Welles and continued by Donald C. McKay, this also is an excellent guide for the college and the high school student and the general reader on topics especially important to Americans. The author seeks to fill the well recognized gap in the intellectual inventory of his fellow citizens by authoritatively describing the historical foundations and cultural heritage of the peoples of India and Pakistan. This information serves as a backdrop to an intelligent understanding of such vital and contemporary issues as America's relation to Pakistan and India. It seeks to erect an underpinning for such critical disputes as the question of Kashmir and problems resulting from the late partition of the sub-continent. Author Brown, a Sanskrit scholar, lived in India as a child for a number of years; as a professor at the University of Pennsylvania he has visited India on several occasions to study its life and people and to probe into its antiquities. J. C.

The Psychology of Learning. By James E. Deese. 330 West 42nd Street, New York 36, New York: McGraw-Hill Book Company, 1952. Pp. 398. \$5.50.

This text accomplishes a broad coverage of the "learning" areas of psychology. The author very desirably documents his discussions with references to recent experimental evidences. He saves a great deal of the reader's time by citing examples which are illustrative of many learning principles, enabling him to refer to them at various points in the book. This is an excellent text for a course in learning for students who have completed courses in general and educational psychology. The difficulty level of the contents appears too great, however, for use with students who have completed only the introductory course in general psychology, although the publisher has recommended its use at this level. L. O. H.

How to Study—How to Solve—Arithmetic through Calculus. By H. M. Dadourian. Kendall Square Building, Cambridge 42, Massachusetts: Addison-Wesley Press, Inc., 1951. Pp. 122. \$1.00.

This small book does not give the kind of help its title implies but does condition students into a state for doing better work through a discussion of the most effective ways of studying mathematics and through definite general directions to avoid self-created obstacles in solving problems. J. J. U.

Uncle Sam of America. By Philip D. Jordan. Illustrated by Edmund M. Kopietz. 55 East 10th Street, St. Paul, Minnesota: The Webb Book Publishing Company, 1953. Pp. 28. \$2.00.

The essence of free democratic America is captured in beautiful prose that at times approaches the poetic in this historic account of the symbol of America. Here is America in its early days—young, lusty, rich, but without essential character or unity. But when America most needed a symbol to give it strength and courage, Uncle Sam appeared and rallied the people of the young country into a united nation. The history of our national symbol is told with simplicity and a style that creates just the proper mood for the story of the strength and character of America as symbolized in Uncle Sam. For high school readers. G. E. B.

General Mathematics at Work. By Claude H. Ewing and Walter Wilson Hart. 285 Columbus Avenue, Boston 16, Massachusetts: D. C. Heath and Company, 1952. Pp. 266. \$2.80.

Twenty-two different fields of industry were surveyed to aid in determining the choice of material contained in this textbook. Included is a wide use of shop drawings and problems that actually occur in the shops. The mathematics used covers arithmetic through elementary algebra and the right triangle of trigonometry. The quality of the text is very good. J. J. U.

Mathematics for Success. By Mary A. Potter et al. Statler Building, Park Square, Boston 17, Massachusetts: Ginn and Company, 1952. Pp. 440. \$2.68.

This is an excellent book, the contents of which were selected from the fields of arithmetic, algebra, geometry, and trigonometry for the purpose of continuing the further study of general mathematics. Many efforts were put forth to make the material functional. J. J. U.

How to Become A Better Reader. By Paul Witty. 57 West Grand Avenue, Chicago 10, Illinois: Science Research Associates, 1953. Pp. 304. \$4.80.

Here is a help-yourself book on reading which recognizes and informs the reader of the complexity of the reading act. The usual exercises to improve comprehension and speed are supplemented with valuable information concerning the specialized reading skills. Enough instruction is given in each skill to help the motivated reader help himself. For older high school students and adults, individually and in classes. I. J. S.

A Puffin Book of Verse. Compiled by Eleanor Graham. 3300 Clipper Mill Road, Baltimore 11, Maryland: Penguin Books, Inc., 1953. Pp. 280. Paperbound, 65 cents.

This anthology ranges from nursery rhymes and non-sense verse to Milton's sonnet on his blindness; the compiler's stated objective was "to find verses which sing in the ear and catch in the mind." A well-selected collection most appropriate for the high school level.

L. M. J.

Fun with Mathematics. By Jerome S. Meyer. 2231 West 110th Street, Cleveland 2, Ohio: The World Publishing Company, 1952. Illustrated. Pp. 176. \$2.75.

Anyone with even a smattering of elementary mathematics can enjoy this book and learn much from it; the experienced mathematician may also gain some new insights due to the type of approaches and the selection of some of the materials. High school teachers looking for something to interest students, especially the brighter ones, will find this book of value. J. J. U.

Basic Ideas of Mathematics. By Francis G. Lankford, Jr. and John R. Clark. 313 Park Hill, Yonkers-on-Hudson 5, New York: World Book Company, 1953. Pp. 504. \$2.84.

This text, designed as a basic course in general mathematics for the ninth-grade student, is a new revision with adaptations from former issues. It covers the phases of arithmetic, algebra, and geometry that are usually found in general mathematics books for students of the indicated grade, and emphasizes some of the fields where the knowledge of mathematics will be helpful.

J. J. U.

Introducing Asia. By Lawrence H. Battistini. 210 Madison Avenue, New York 16, New York: The John Day Company, 1953. Pp. 289. \$3.75.

A novice in the history of the Far Eastern peoples will find this a useful manual of orientation. Mr. Battistini covers a vast geographic, economic, cultural, and historical field. He traces the highlights of Chinese, Japanese,

Indian, and South Eastern political development and culture from early historic times to World War II and after. Though succinct, his account is clear and coherent. His vantage point is that of an observer in the Eastern Hemisphere from 1846 to 1951. Adequate notes to the text and a selected bibliography are an invitation to further study of the Orient. These materials are available to the student in any well stocked library. J. C.

Review Digest of Elementary Algebra, Review Digest of Intermediate Algebra, and Review Digest of Trigonometry. By Daniel Malament. Pp. 122, 156, and 154 respectively. 1947, 1947, and 1949 respectively. *Review Digest of Advanced Algebra.* By Eugenie Hausle. Pp. 90. 1947. *Review Digest of Plane Geometry.* By Eugenie Germino. Pp. 166, including 8 pages of co-ordinate geometry by Eugenie Hausle. 1950. *Review Digest of Solid Geometry.* By Julius H. Hlavaty. Pp. 88. 1947. 115 East 53rd Street, New York 22, New York: Republic Book Company, Inc. 25 cents each.

Except for *Review Digest of Elementary Algebra*, these books are designed to meet the requirements of the New York State Regents Syllabus and to help students review and master each topic. Each book contains model solutions, formulas, drill exercises, and several sets of recent Regents Examinations. *Review Digest of Elementary Algebra* covers the usual standard elementary algebra topics and contains several recent sets of examinations given by the Buffalo, New York, Board of Education. These books are of value only for those students who have previously had a good course in the subject matter. J. J. U.

Getting to Know Korea. By Regina Tor. 210 Madison Avenue, New York 16, New York: Coward-McCann, Inc., 1953. Pp. 48. \$2.25.

There is an immense amount of information children really want about a country in this small, well-printed volume. Directly told and accompanied by illustrations done in clear, brush strokes with an occasional filling of bright cerise. Clothing, food, transportation, and markets are described; a brief chronological table at the end mentions recent critical events. E. R.

Ouray the Arrow. By Olive Burt. Illustrated by Harper. 8 West 40th Street, New York 18, New York: Julian Messner, Inc., 1953. Pp. 174. \$2.75.

The story of an Indian chief who dedicated his life to the ideal of peace between his fellow Utes and the white men who encroached upon their land in search for gold. A good picture of the Colorado Territory before statehood and an excellent documentary account of Ouray and his people in their struggle for survival in a changing world. If there is a weakness in the book, it lies in the excessive documentation of historical fact which tends to interrupt the flow of the narrative at times. This may tend to discourage some young readers from readily accepting an otherwise excellent biography. G. E. B.

No Way Back. By Hilda Cumings Price. Illustrated by Christine Price. 300 Fourth Avenue, New York 10, New York: E. P. Dutton and Company, Inc., 1953. Pp. 192. \$2.50.

The Civil War in England and the reign of Charles the First provide the setting for this historical novel for older boys and girls. The plot revolves around the love story of two young people whose sympathies place them on opposite sides of the civil conflict. Despite occasional flurries of exciting action and well-written dialogue, the story is without originality; the historical aspects, although accurate, do not provide the simplicity of structure essential for full understanding by young readers. G. E. B.

How to Make Doll Clothes. Written and illustrated by Emily R. Dow. 210 Madison Avenue, New York 16, New York: Coward-McCann, Inc., 1953. Pp. 94. \$1.95.

This is a charming book for anyone interested in making doll clothes as a hobby. Every type of outfit for dolls is included, from the simplest undergarments to the elaborate "dressing the bride." The patterns used for the garments are made by drawing the outline around the doll and the constructive processes are those used in all dressmaking projects. Knowledge of practical sewing as well as some ability in pattern drafting are needed in order to follow the instructions for making the articles described in the book. T. O'S.

The Pictorial Baseball Instructor. By Lamont Buchanan. 300 Fourth Avenue, New York 10, New York: E. P. Dutton and Company, Inc., 1954. Pp. 124. \$2.95.

A rather pleasant book for the casual reader. The instructions and illustrations are quite good; the beginning baseball player will find many excellent hints on playing the different positions on his team. G. W. B.

Perfect Fit. By Bonnie Early et al. 201 East 57th Street, New York 22, New York: Greenberg, Publisher, 1953. Pp. 69. \$2.75.

Points of emphasis are placed on fitting to measure and cutting to the grain as these procedures in garment making relate to perfection in clothes of quality. The meaning of grain of fabric is explained and methods for

scoring patterns for lengthwise as well as for crosswise grain are presented. A "grain guide" for use in scoring patterns is included. Methods for taking measurements and instructions for adjusting patterns to variations in figures are given in considerable detail. T. O'S.

The Captive Princess: The Story of the First Christian Princess of Britain. By Maxine Shore. Illustrated by Kreigh Collins. 55 Fifth Avenue, New York 3, New York: Longmans, Green and Company, Inc., 1952. Pp. 309. \$3.00.

A most sympathetic account of the growth of Christianity in the first century, against a background of the customs of early Britain and of the Roman way of living. The plot moves haltingly at times in the midst of a wealth of historical and biblical detail. M. G. K.

Mr. Fullback. By William Campbell Gault. 300 Fourth Avenue, New York 10, New York: E. P. Dutton and Company, Inc., 1953. Pp. 187. \$2.50.

In this excellent book for boys and girls of high school age, the reader gets a realistic picture of college football. Emphasis is placed on the unethical and unsportsmanlike practices of universities that put greater value on their alumni associations and football teams than their educational programs. This book relates how such a system could be defeated if good players would refuse to enroll in schools of this type. G. Z.

FOR YOUNGER CHILDREN

In Yards and Gardens. Written and illustrated by Margaret Waring Buck. 810 Broadway, Nashville 2, Tennessee: Abingdon-Cokesbury Press, 1952. Pp. 72. \$3.00.

This delightful book awakens a wholesome curiosity and interest in living creatures and in growing things which exist just outside our house doors. Ants, spiders, moths, sparrows, and trees are common to the most crowded city districts and fascinate children when their attention is directed to them. The information given is sufficient for a beginner in this field of study. The black and white wash drawings by the author are accurate and well placed. This is a good reference book for middle grades, or even earlier ones; it also furnishes suggestions for sources of further information. The recognition of beauty and the sense of wonder inspired by this book are conducive to wholesome, happy living. D. E. W.

Snow Bumble. Written and illustrated by Magdalen Eldon. 597 Fifth Avenue, New York 17, New York: Charles Scribner's Sons, 1952. Unp. \$1.75.

Six days of snow in the forest disables many animals, and the Chinese-Scotch Pekinese, aided by the Mac-mouses and the beetles, works hard at the rescue. It's imaginative fun to hear about the use of tail-protectors, buttercup brandy, arctic-explorers, surplus-stock-suitings, thistle-down beds, and black currant lozenges, and then to examine the minutely detailed drawings. The staggered print and vocabulary would make impossible reading for the primary children most enthralled by the story. M. G. K.

Ridge Willoughby. By Cena Christopher Draper. Illustrated by Elizabeth Rice. 9th and Lavaca Streets, Austin 1, Texas: The Steck Company, 1952. Pp. 119. \$2.00.

The story of a Missouri boy who lives with four generations of relatives. Ridge explores the countryside with his pet skunk in a series of incidents that in only one or two instances become real adventures. The episodic story gets off to a slow start, and many of the chapters dwindle to uneventful conclusions. J. M. K.

Ups and Downs, A First Book About Space. By Ethel S. Berkley. Illustrated by Kathleen Elgin. 8 West 13th Street, New York 11, New York: William R. Scott, Inc., 1952. Unp. \$1.00.

A beginning book about space for the primary grade child. How high is up? Where is under? How low is bottom? This difficult subject is ably handled through the use of illustrations within the child's experience. V. K.

How Your Body Works. By Herman and Nina Schneider. 8 West 13th Street, New York 11, New York: William R. Scott, Inc., 1949. Pp. 160. \$2.75.

An interestingly written book that concerns itself with explanations of basic processes—digestion, elimination, respiration, circulation, and the special senses in terms of simple experiments. The easy flowing style of language is readily understood by the average upper-grade elementary school child. The illustrated experiments are simple, direct, effective, and are to be performed by the student reader. Because needs and interests of this age level are given due consideration, it is a book that should be made accessible to children so that health concepts may be more effectively learned "by doing" experiences. U. M.

Pamela and the Blue Mare. By Alice L. O'Connell. Illustrations by Paul Brown. 34 Beacon Street, Boston 6, Massachusetts: Little Brown and Company, 1952. Pp. 217. \$2.50.

Owing to a fright which she had had at the age of five, Pamela was afraid of horses. However, one summer at Grandfather Paget's she helped nurse a weak, new-born colt to health and was given the honor of naming it—Frosty Morning. Through this experience she overcame her fear and because of wise guidance eventually became an expert horsewoman, taking honors in the Annual Hunt and Horse Show. Inasmuch as the author has ridden all her life and has appeared in hunts, horse shows, and amateur races, she presents Pam's experiences with clarity and assurance. An excellent book for horse lovers of all ages even though it has been designed for the eight- to twelve-year-olds. E. M. H.

What's Inside of Animals? By Herbert S. Zim. Illustrated by Herschel Wartik. 425 Fourth Avenue, New York 16, New York: William Morrow and Company, Inc., 1953. Pp. 32. \$1.75.

This book has been planned for children of a wide range in age and ability. Young children who are curious will learn from the beautiful, colored illustrations; children who have ability to read independently will be interested in the text which is printed in large type; older children, teachers, and parents will read the small-type text. An excellent, well-organized book about eight different animals. M. G. H.

Richard Brown and the Dragon. Written and illustrated by Robert Bright. 575 Madison Avenue, New York 22, New York: Doubleday and Company, Inc., 1952. Pp. 92. \$2.00.

An inventive bucket-maker's apprentice is a match for the dragon and for the princess, anxious to get married. This story is not quite as successful as the original Clemens anecdote, but the sophisticated humor, incongruous modern colloquial expressions, and the inventive hindsight should be within the comprehension and enjoyment of space-minded youngsters. M. G. K.

Three Boys and a Tugboat. By Nan Hayden Agle and Ellen Wilson. Illustrated by Marian Honigman. 597 Fifth Avenue, New York 17, New York: Charles Scribner's Sons, 1953. Pp. 122. \$2.25.

This fast moving adventure about boy triplets of primary age holds forth aboard their uncle's tugboat. Facts about the tugboat and life at sea build possibility into a highly imaginative story. This book would be fine outside reading and of great use in any primary unit concerned with the sea or transportation. M. M. L.

What's Inside of Engines? By Herbert S. Zim. Illustrated by Raymond Perlman. 425 Fourth Avenue, New York 16, New York: William Morrow and Company, Inc., 1953. Pp. 32. \$1.75.

Boys who are interested in engines will want this book which has been organized in such a way that young children will learn from the colorful pictures; middle-grade children will read the large-type text; and older children, teachers, and parents will read the text printed in small type. M. G. H.

The Boy Who Stole the Elephant. By Julilly H. Kohler. Illustrated by Lee Ames. 501 Madison Avenue, New York 22, New York: Alfred A. Knopf, 1952. Pp. 89. \$2.50.

Twelve-year-old Gyp needs to love and be loved, and Queenie, "the Biggest Living Thing" responds to his care as the small circus travels about in Kentucky. Outwitting the chicanery and cruelty of Mr. Catfish Williams makes an exciting, engrossing, fast-moving story in which there is humor and pathos, and especially a penetrating, wistful characterization of a most lovable boy. M. G. K.

This Boy Cody and His Friends. By Leon Wilson. Illustrated by Ursula Koering. 699 Madison Avenue, New York 21, New York: Franklin Watts, Inc., 1952. Pp. 272. \$2.50.

When it snowed so hard on Cumberland Mountain that school couldn't "keep," Cody Capshaw became bored with having nothing to do at home. Therefore, his mother sent him to Jeff Applegate's to "fetch a ham." Here, Cody got not only the ham but also the idea of making a fiddle like Uncle Jeff's. The story centers around this project and his ambition to participate in the Old Time Fiddlers Contest on July 4; in addition there is much about the activities of the whole Capshaw family and their neighbors. For ages eight to twelve. E. M. H.

Little Wolf Slayer: A Story of Philadelphia's First Quakers. By Donald E. Cooke. Illustrated by Henry C. Pitz. 1006-1020 Arch Street, Philadelphia 7, Pennsylvania: John C. Winston Company, 1952. Pp. 184. \$1.50.

The hard winter of 1682-83 forced newly-settled Quaker families to find refuge in caves along the mud-bank of the Delaware. Letters and diaries suggested the adventures of Miles and Becky Townsend with Indians, Dutch settlers, wild turkeys, and wolves. The reader is vividly transported to colonial Philadelphia to share in the hardships as well as comforts of living through a first American winter. M. G. K.

Sound: An Experiment Book. By Marian E. Baer. Illustrated by Jean Martinez. 8 West 13th Street, New York 11, New York: Holiday House, 1950. Pp. 127. \$2.50.

Sound becomes a fascinating subject for nine- or ten-year-olds who perform the simple experiments described in this book. They are arranged in a sequential order: Sound Is Vibration, Sound Travels, Making Sounds Louder, Sound Bounces, Hushing Sounds, Low Tone and High Tone. They are written in a lively style and stimulate the child to make original experiments with materials in his or her own environment. D. E. W.

A Boy for a Man's Job; the Story of the Founding of St. Louis. By Nina Brown Baker. Illustrated by Edward F. Cortese. 1006 Arch Street, Philadelphia 7, Pennsylvania: The John C. Winston Company, 1952. Pp. 179. \$1.50.

The sweep of adventure and frontier life on the Mississippi, and the poignant, soul-stirring confidence of a stepfather in a fourteen-year-old boy are interwoven in the memorable story of the establishment of a St. Louis fur trading post. Each reader will be entranced with the authentic danger and heroism and good judgment exemplified in the experiences of Auguste Chouteau. M. G. K.

The Horse with the Easter Bonnet. By Jane Thayer. Illustrated by Jay Hyde Barnum. 425 Fourth Avenue, New York 16, New York: William Morrow and Company, 1953. Pp. 48. \$2.00.

Mr. O'Flaherty's hungry horse Josie was too weak to pull her carriage around Central Park at a quick pace, so no one wanted to ride her. But when an Easter bonnet was perched on her head, she trotted proudly all afternoon and earned enough money for a fine dinner. Children will love this delightful story. M. J. W.

Rick of High Ridge. By Sara Machetanz. Illustrated by Fred Machetanz. 597 Fifth Avenue, New York 17, New York: Charles Scribner's Sons, 1952. Pp. 177. \$2.50.

Neither television, the movies, nor band trips can compete with the excitement of leaving Ohio to establish a homestead in Alaska. A true adventure lover will thrill to the realities of finding a homesite, building roads, earning a dog, and overcoming the jinx experiences of previous settlers. The capitulation of an annoying neighbor is a bit too abrupt; the inclusion of a map would elucidate the Alaska highway trip. M. G. K.

Shadrach. By Meindert DeJong. Illustrated by Maurice Sendak. 49 East 33rd Street, New York 16, New York: Harper and Brothers, 1953. Pp. 182. \$2.50.

This pictures the interminable time a week can be to a small boy waiting for a promised rabbit, and all his fears and worries, culminating in the rabbit's escape from and return to the hutch. The author's nostalgia for his own boyhood in the Netherlands has produced a psychologically sound tale of childhood. It may appeal to a few sensitive and introspective children but seems to have more appeal for parents. E. R.

EDUCATIONAL CONFERENCES AND CONVENTIONS

June 16-22: School for Executives, American Association of Colleges for Teacher Education, NEA, Buffalo, New York.

June 21-24: Eighteenth Annual National Conference, National Association of Student Councils, NEA, St. Paul, Minnesota.

June 27-July 1: Nineteenth Annual Meeting, National School Public Relations Association, NEA, New York City.

June 27-July 2: Ninety-second Annual Meeting, NEA, New York City.

July 5-7: American Home Economics Association, San Francisco, California.

July 5-16: Conference in Elementary Education, Department of Elementary School Principals, NEA, with Northwestern University, Chicago, Illinois.

July 23-25: Annual Convention, National Association of Education Secretaries, NEA, Eugene, Oregon.

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